# United States Court of Appeals for the Second Circuit

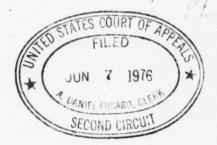


# SUPPLEMENTAL APPENDIX

# 75-6115 76-6022 76-6081

IN THE UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

Docket Nos. 75-6115 76-6022 76-6081



THE STATE OF NEW YORK,

Plaintiff-Appellant,

-against-

THE NUCLEAR REGULATORY COMMISSION, et al.,

Defendants-Appellees.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK

SUPPLEMENTAL APPENDIX
VOLUME I

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#### TABLE OF CONTENTS

Volume I	Appendix Page
List of Docket Entries	. 1
Motion For Preliminary Injunction	
Summons	5
Complaint	7
Affidavit - John F. Shea, III, sworn May 2, 1975	122
*Supplemental Affidavit - John F. Shea, III, sworn May 2, 1975	. 929
Affidavit - Peter N. Skinner, sworn April 29, 1975	. 128
Affidavit - Dr. Marvin Resnikoff, sworn April 25, 1975	. 143
*Supplemental Affidavit - Peter N. Skinner, sworn May 2, 1975	. 934
Order To Show Cause dated May 6, 1975	. 174
Transcript - May 7, 1975, Before Hon. William C. Conner	. 177
Defendants' Affidavits in Opposition To Motion For Preliminary Injunction	
Affidavit - Charles Richter, sworn May 30, 197	5. 211
Affidavit - Lee V. Gossick, sworn May 29, 1975	. 215

i

<sup>\*</sup> Items marked by asteriks were sealed at the request of parties during the proceedings below by the District Court and are contained in Volume III of this Appendix which should be similarly treated as sealed.

Appen	dix Page
Affidavit - Frank K. Pittman, sworn May 29, 1975	232
Affidavit - Leland C. Rouse, sworn May 29, 1975	236
Affidavit - Joseph V. Catania, sworn May 29, 1975	251
Affidavit - G. Wayne Kerr, sworn May 29, 1975	255
Affidavit - Dixi Lee Ray, sworn May 28, 1975	268
Affidavit - Herbert H. Kaiser, sworn May 29, 1975	275
Affidavit - Donald A. Nussbaumer sworn May 29, 1975 with Exhibits A, B and D.	286
Affidavit - Robert F. Barker, sworn May 30, 1975.	387
Affidavit - Ralph G. Page, sworn May 29, 1975	424
Affidavit - Ernest Graves, sworn May 29, 1975	577
Volume II Plaintiff's Reply Affidavits on Motion For Preliminary Injunction	
Affidavit - John F. Shea, III, sworn June 16, 1975	580
Affidavit - Karl Z. Morgan, sworn June 6, 1975.	615
Affidavit - Irving Pinkel, sworn June 10, 1975.	619
Affidavit - Dr. John W. Gofman, sworn June 10, 1975	640
Affidavit - Dr. Seville Chapman, sworn	698

## Appendix Page

Affidavit - Dr. Marvin Resnikoff, sworn June 12, 1975	705
Affidavit - Peter N. Skinner, sworn June 13, 1975	712
*Affidavit - T. Mason and R. Leamer, sworn June 16, 1975	949
Letter - Charles Richter to Hon. William C. Conner dated June 10, 1975	743
Letter - John F. Shea, III, to Hon. William C. Conner dated June 24, 1975 with enclosure number 2 only	745
Transcript - July 3, 1975, Before Hon. William C. Conner	761
Letter - John F. Shea, III, to Hon. William C. Conner dated July 17, 1975	788
Affidavit - Dr. John W. Gofman, sworn July 21, 1975	790
Letter - Charles Richter to John F. Shea, III dated July 25, 1975	831
Transcript - July 25, 1975, Before Hon. William C. Conner	835
Transcript - July 31, 1975, Before Hon. William C. Conner	865
*Affidavit - John F. Shea, III, sworn July 31, 1975	984
*Affidavit - Peter N. Skinner, sworn July 31, 1975	988
*Transcript - August 4, 1975, Before	992

	Appendix	Pag
Transcript - August 20, 1975, Before Hon. William C. Conner	875	5
Answer of Defendants (other than Civil Aeronautics Board ["CAB"] Robert D. Timm, U.S. Customs Service,		
Vernon B. Acree and Fred R. Boyett)	88	9
*Affidavit - Leo Macklin, sworn September 2, 1975	. 10	13
Order, William C. Conner, U.S.D.J., denying plaintiff's motion for preliminary injunction filed September 9, 1975	n, . 89	5
Notice of Appeal, filed November 7, 1975	. 91	.2
Motion To Dismiss		
Defendants' Civil Aeronautics Board and U.S. Customs service Notice of Motion, August 15, 1975	91	L <b>4</b>
Affidavit of John F. Shea, III, sworn September 5, 1975	. 91	L6
Appendix to Plaintiffs' Memorandum of Law in opposition to Defendants' Motion to Dismiss the Complaint, dated September 5, 1975	. 91	17
Order, William C. Conner, U.S.D.J., granting motion to dismiss complaint as to CAB and Customs Service, filed December 23, 1975.	. 92	22
Notice of Appeal, filed February 5, 1976	. 9:	28
*Volume III		
Supplemental Affidavit - John F. Shea, III, sworn May 2, 1975	. 9	29

Supplemental Affidavit - Peter N. Skinner, Sworn May 2, 1975	934
Affidavit - T. Mason and R. Leamer, Sworn June 16, 1975	949
Affidavit - John F. Shea, III, Sworn July 31, 1975	984
Affidavit - Peter N. Skinner, Sworn July 31, 1975	988
Transcript - Augsut 4, 1975, Before Honorable Charles E. Stewart .	992
Affidavit - Leo Macklin, Sworn September 2, 1975	1013
Supplemental Appendix Volume I	
Updated List of Docket Entries	1016
Letter - John F. Shea, III, to Honorable William C. Conner dated July 24, 1975	1020
Plaintiff's Notice of Motion for Preliminary Injunction and Motion for Summary Judgment dated December 12, 1975	
Statement Pursuant to Rule 9(g) of the General Rules of the United States District Court dated December 12, 1975	
Affidavit - John F. Shea, III Sworn to December 11, 1975	1028
**Affidavit - Theodore T. Mason and Robert R. Leamer, sworn to November 30, 1975	1033
Affidavit - Captian James A. Eckols, Sworn to November 28, 1975	1043
Transcript - December 12, 1976, Before Honorable William C. Conner	1114

Appendix Page

<sup>\*\*</sup>Document scaled by the District Court at the request of plaintiff.

Unnellary radi	Ap	pendi	x Page
----------------	----	-------	--------

Affidavit - Jack Edlow, sworn to January 14, 1976	1135
Affidavit - Robert F. Barker, Sworn to January 15, 1976	1163
Affidavit - John F. Shea, III, Sworn to January 20, 1976	1167
** Affidavit - Theodore T. Mason and Robert R. Leamer, Sworn to January 20, 1976	1171
Letter - David Aronson, Senior Law Clerk to John F. Shea, III dated March 26, 1976	1181
Letter - Joseph J. Zedrosser to Honorable William C. Conner dated April 2, 1976	1182
Letter - Charles F. Richter to Honorable William C. Conner dated April 13, 1976	1186
Letter - Joseph J. Zedrosser to Honorable William C. Conner dated April 22, 1976	1188
Order, William C. Conner, U.S.D.J. denying plaintiff's motions for declaratory and	
mandatory relief and for preliminary injunctive relief	1190
Notice of Appeal, filed May 12, 1976	1208
Letter - Charles F. Richter to Honorable William C. Conner dated May 13, 1976	1210
Letter - Joseph J. Zedrosser to Honorable William C. Conner dated May 13, 1976	1213
Transcript - May 20, 1976, Before Honorable William C. Conner	1217

# Supplemental Appendix - Volume II

Draft Environmental Statement on the Transporation of Radioactive Materials by Air and Other Modes 17 11-21-75

Part 73-Physical Protection of Plants and Mater

[Sec. 73.5 (formerly Sec. 73.12) as redesignated November 6, 1973, effective December 6, 1973 (38 F. R. 30539).] 

Sec. 73.6. Exemptions for certain quantities and kinds of special nuclear material.—A licensee is exempt from the requirements of §§ 73.30 through 73.36 and of §§ 73.60, 73.70 and 73.72 of this part, with respect to the following special nuclear material:

(a) Uranium-235 contained in uranium enriched to less than 20 percent

in the U-235 isotope;

(b) Special nuclear material which is not readily separable from other radioactive material and which has a total external radiation dose rate in excess of 100 rems per hour at a distance of 3 feet from any accessible surface without intervening shielding; and

(c) Special nuclear material in a quantity not exceeding 350 grams of uranium-235, uranium-233 plutonium, or a combination thereof, possessed in any analytical, research, quality control, metallurgical or electronic

[Sec. 73.6 (formerly Sec. 73.13) as amended and redesignated November 6, 1973, effective December 6, 1973 (38 F. R. 30539); amended November 13, 1975, effective December 15, 1975 (40 F. R. 52841).]

### PHYSICAL PROTECTION OF SPECIAL NUCLEAR MATERIALS IN TRANSIT to be used, the velous value. [808e m] the tale to stem security and

\* Sec. 73.30. General requirements.—(a) Except as specified in paragraph § 73.36(a) or as otherwise authorized pursuant to § 73.30(f), each licensee who transports or who delivers to a carrier for transport either uranium-235 (contained in uranium enriched to 20 percent or more in the U-235 isotope), uranium-233, or plutonium, or any combination of these materials, which is 5,000 grams or more computed by the formula, grams = (grams contained U-235) +2.5 (grams U-233+grams Pu), shall make arrangements to assure that such special nuclear material will, if a common or contract carrier is used, be transported under the established procedures of a carrier which provides a system for the physical protection of valuable material in transit and requires an exchange of hand-to-hand receipts at origin and destination and at all points enroute where there is a transfer of custody.

(b) Transit times of shipments other than those specified in § 73.1(b)(3) shall be minimized and routes shall be selected to avoid areas of natural disaster or civil disorders. Such shipments shall be pre-planned to assure that deliveries occur at a time when the receiver at the final delivery point is present to accept receipt of shipment.

c) Special nuclear material shall be shipped in containers which are sealed by tamper indicating type seals. The containers shall also be locked

The Atomic Energy Commission gave notice in the Federal Register of November 13, 1974 (39 F. R. 40037) that it is considering amending

(39 F. R. 40037) that it is considering amending \$73.30 by deleting paragraph (g) and revising paragraphs (c) and (e) to read as follows:

"(c) Special nuclear material shall be shipped in containers which are sealed by tamper indicating type seals. The container shall also be locked if it is not in another container or vehicle which is locked. The outermost container or vehicle shall also be sealed by tamper indicating type seals. Only containers weighing 5,000 pounds or more shall be shipped in open rail-

road cars. This paragraph does not apply to shipments of quantities specified in § 73.1(b) (3).

"(e) By (sixty days after publication) each licensee who has previously submitted a plan to ship quantities of special nuclear material in excess of those specified in § 73.1(b) (2) shall update his plan outlining the procedures that will be used to meet the new requirements of §§ 73.30(c), 73.31(c), 73.32(b) and (c), 73.33(a), 73.34(a), (b) and (c), and 73.35(a) and (b)."

10 CFR § 73.30 J 9308

Nuclear Regulation Reports

if it is not in another container or vehicle which is locked. If inspection of the container or vehicle is not required by State or local authorities before final destination, the outermost container or vehicle shall also be sealed by tamper indicating type seals. No container weighing 500 pounds or less shall be shipped in open trucks, railroad flat cars or box cars and ships. This paragraph does not apply to shipments of quantities specified in § 73.1(b)(3).

(d) When guards are used pursuant to §§ 73.31(c)(1), 73.31(c)(2), 73.33 and 73.35, the licensee shall not permit an individual to act as a guard unless there is documentation that the individual has been qualified by demonstrating an understanding of his duties and responsibilities. The licensee or his agent shall have documentation that guards have been requalified annually.

(e) By January 7, 1974, each licensee shall submit a plan outlining the procedures that will be used to meet the requirements of §§ 73.30 through 73.36 and 73.41(c) including a plan for the selection, qualification, and training of armed escorts, or the specification and design of a specially designed truck or trailer as appropriate. This plan shall be followed by the licensee after March 6, 1974.

(f) A licensee or applicant for a license may apply to the Commission for approval of proposed procedures for transport of special nuclear material in a manner not otherwise authorized by the regulations of this part. Such application shall include a description and quantity of the special nuclear material involved, the origin and destination, the carriers to be used, the expected time in transit, the number of transfer points, the communications to be used, the vehicle visual identification, and the cargo security and surveillance measures to be used.

(g) Paragraphs (b), (c), (d), and (f) of this section are effective March 6, 1974.

[Sec. 73.30 as added effective February 1, 1973 (38 F. R. 3038); amended November 6, 1973, effective December 6, 1973 and March 6, 1974 (38 F. R. 30535 and 30540); republished December 28, 1973 (38 F. R. 35432).]

#### [¶ 9309]

ration is woned to member † Sec. 73.31. Shipment by road .- (a) All shipments by road shall be made without any scheduled intermediate stops to transfer special nuclear material or other cargo between the facility from which it is shipped and the facility of the receiver.

† The Atomic Energy Commission gave notice in the Federal Register of November 13, 1974 (39 F. R. 40037) that it is considering amending

(39 F. R. 40037) that it is considering amending 73.31 by deleting paragraph (f) and revising paragraph (c) to read as follows:

"(c) A shipment shall be accompanied by at least two guards in the vehicle containing the shipment. The shipment shall be further protected by one of the following methods:

"(1) The shipment shall be made in a specially designed truck or trailer which reduces the religious produces the property of the content of the content

the vulnerability to theft. Design features of the truck or trailer shall permit immobilization of the van and provide barriers or deterrents to physical penetration of the cargo compartment.

A separate escort vehicle, with at least two
guards shall accompany the shipment. Guards
shall maintain continuous vigilance for the presence of conditions or situations which might threaten the security of the shipment, take such action as circumstances might require to avoid interference with continuous safe passage of the cargo vehicle, provide assistance to, or summon aid for crew of cargo vehicles in case of emergency, check seals and locks at each stop where time permits, and observe the cargo vehicle and adjacent areas during stops. The vehicle con-taining the shipment shall be under continuous visual surveillance by at least two guards during rest stops. Continuous radio communication capability shall be provided between the cargo capability shall be provided between the Cargo
vehicle and the escort vehicles. Escort vehicles
shall also be equipped with a radiotelephone.
The licensee may use his own employees as
quards or he may use an agent.

"(2) The shipment shall be made in an ar-

mored car accompanied by two separate escort vehicles with at least two guards in each vehicle when the ability to communicate by radiotele-phone or radio is not always available during the course of the shipment because of inade-quate communication range. When communica-tion coverage is always available during the course of the shipment, armored car shipments may be made with only one separate escort vehicle containing at least two guards. The escorts' duties shall be the same as those specifled in § 73.31(c)(1)."

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¶ 9309 10 CFR § 73.31

- (b) All motor vehicles used to transport special nuclear material shall be equipped with a radiotelephone which can communicate with a licensee or his agent. The licensee or agent with whom communications shall be maintained for different segments of the shipment shall be predesignated before a shipment is made. Calls to such licensee or agent shall be made at least every 2 hours when radiotelephone or conventional telephone coverage along the route is available to relay position and projected route. Call frequency may extend up to 5 hours when radiotelephone or conventional telephone coverage is not available along the pre-planned route, at which time a conventional telephone call shall be made. In the event no call is received in accordance with these requirements, the licensee or his agent shall immediately notify an appropriate law enforcement authority and the appropriate Nuclear Regulatory Commission Inspection and Enforcement Regional Office listed in Appendix A of this part.
- (c) A shipment shall be accompanied by at least two people in the vehicle containing the shipment, which may be two drivers or one driver and an authorized individual. The vehicle containing the shipment shall be under continuous visual surveillance, or one of the drivers or authorized individuals shall be in the cab of the vehicle, awake, and not in a sleeper berth. The shipment shall be further protected by one of the following methods:
- 1) An armed escort consisting of at least two guards shall accompany the shipment in a separate escort vehicle. Escorts shall maintain continuous vigilance for the presence of conditions or situations which might threaten the security of the shipment, take such action as circumstances might require to avoid interference with continuous safe passage of the cargo vehicle, provide assistance to, or summon aid for crew of cargo vehicles in case of emergency, check seals and locks at each stop where time permits, and observe the cargo vehicle and adjacent areas during stops or layovers. Continuous radio communication capability shall be provided between the cargo vehicle and the escort vehicle. Escort vehicles shall also be equipped with a radiotelephone. The licensee may use his own employees as armed escorts or he may use an agent. Only the driver is required in the vehicle containing special nuclear material for shipments involving an average of less than an hour in transportation, if continuous radiotelephone or radio communication is maintained during the course of the shipment with the licensee or agent monitoring the shipment.
- (2) The shipment shall be made in a specially designed truck or trailer which reduces the vulnerability to diversion. Design features of the truck or trailer shall permit immobilization of the van and provide barriers or deterrents to physical penetration of the cargo compartment unless armed guards are also used in which case immobilization of the vehicle is not required.
- (d) Transfers to and from other modes of transportation shall be in accordance with § 73.35.
- (e) Vehicles shall be marked on top with identifying letters or numbers which will permit identification of the vehicle under daylight conditions from the air in clear weather at 1,000 feet above ground level. The same code of letters and numbers as those used on the top shall also be marked on the sides and rear of the vehicle to permit identification from the ground.
  - (f) This section is effective March 6, 1973.

[The next page is 9409.]

[Sec. 73.31 as amended December 18, 1969, effective January 30, 1970 (34 F. R. 20386); amended effective January 11, 1973 (38 F. R. 1271); amended November 6, 1973, effective March 6, 1974 (38 F. R. 30535); republished December 28, 1973 (38 F. R. 35432); officially corrected January 21, 1974 (39 F. R. 2352); amended effective March 3, 1975 (40 F. R. 8793).]

#### · [¶ 9310] ·

\*Sec. 73.32. Shipment by air.—(a) Except as specifically approved by the Nuclear Regulatory Commission, no shipment of special nuclear material shall be made in passenger aircraft in excess of (1) 20 grams or 20 curies whichever is less, of plutonium or uranium-233, or (2) 350 grams of uranium-235 (contained in uranium enriched to 20 percent or more in the U-235 isotope).

(b) In shipments on cargo aircraft of either uranium-235 (contained in uranium enriched to 20 percent or more in the U-235 isotope), uranium-233 or plutonium, or any combination of these materials which is 5,000 grams or more computed by the formula grams = (grams contained U-235) + 2.5 (grams U-233 + grams Pu), transfers shall be in accordance with § 73.35. Transfers shall be minimized.

(c) Export shipments shall be escorted by an unarmed authorized individual, who may be a crew member, from the last terminal in the United States until the shipment is unloaded at a foreign terminal. He shall perform monitoring duties at foreign terminals as described in § 73.35.

(d) Paragraph (c) of this section is effective March 6, 1974.

[Sec. 73.32 as added November 6,1973, effective March 6, 1974 (38 F. R. 30536); republished December 28, 1973 (38 F. R. 35432).]

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\*\* Sec. 73.33. Shipment by rail.—(a) A shipment by rail shall be escorted by two guards, in the shipment car or an escort car of the train, who shall keep the shipment cars under observation and who shall detrain at stops when practicable and time permits to guard the shipment cars under observation, and check car or container locks and seals. Radiotelephone communication shall be maintained with a licensee or his agent to relay position every 2 hours or less, and at scheduled stops in the event that radiotelephone coverage was not available in the last 5 hours before the stop. The licensee or agent with whom communications shall be maintained for different segments of the

The Atomic Energy Commission gave notice in the Federal Register of November 13, 1974 (39 F. R. 40037) that it is considering amending 173.32 by deleting paragraph (d) and revising paragraphs (b) and (c) to read as follows:

§ 73.32 by deleting paragraph (d) and revising paragraphs (b) and (c) to read as follows:

"(b) Shipments on cargo aircraft of either uranium-235 (contained in uranium enriched to 20 percent or more in the U-235 isotope), uranium-233 or plutonium, or any combination of these materials which is 5,000 grams or more computed by the formula, grams = (grams contained U-235) + 2.5 (grams U-233 + grams plutonium) shall be made only on U. S. registered aircraft and shall be accompanied by two guards. Transfers of these shipments shall be minimized and shall be conducted in accordance with 173.35.

"(c) Export shipments shall be accompanied by two guards from the last terminal in the United States until the shipment is unloaded at a foreign terminal. They shall perform monitoring duties at foreign terminals as described in § 73.35, except that such guards need not be armed at foreign terminals."

\* The Atomic Energy Commission gave notice in the Federal Register of November 13, 1974 (29 F. R. 40037) that it is considering amending \$73.33 by deleting paragraph (c) and revising paragraph (a) to read as follows:

"(a) A shipment by rail shall be escorted by five guards, in the shipment car or an escort car of the train, who shall keep the shipment cars under observation and who shall detrain at stops when practicable and time permits to guard the shipment cars under observation and check car or container locks and seals. Radiotelephone communication shall be maintained with a licensee or his agent to relay position every 2 hours or less, and at scheduled stops in the event that radiotelephone coverage was not available in the last 5 hours before the stop. The licensee or agent with whom communications shall be maintained for different segments of the shipment shall be predesignated before a shipment is made. In the event no call its received in accordance with these requirements, the licensee or his agent shall immediately notify an appropriate law enforcement authority and the appropriate law enforcement authority and the appropriate Atomic Energy Commission Regulatory Operations Regional Office listed in Appendix A of this part."

10 CFR § 73.33 ¶ 9311

Nuclear Regulation Reports

shipment shall be predesignated before a slipment is made. In the event no call is received in accordance with these requirements, the licensee or his agent shall immediately notify an appropriate law enforcement authority and the appropriate Nuclear Regulatory Commission Inspection and Enforcement Regional Office listed in Appendix A of this part.

- (b) Transfers shall be in accordance with § 73.35.

(c) This section is effective March 6, 1974. [Sec. 73.33 as added November 6, 1973, effective March 6, 1974 (38 F. R. 30536); republished December 28, 1973 (38 F. R. 35432); amended effective March 3, 1975 (40 F. R. 8793).] (1)

- † Sec. 73.34. Shipment by sea.—(a) Shipments shall be made on vessels making the minimum ports of call. Transfers to and from other modes of transportation shall be in accordance with § 73.35. There shall be no scheduled transfers to other ships. At domestic ports of call where other cargo is transferred, the shipment shall be protected in accordance with § 73.35(a).
- (b) The shipment shall be placed in a secure compartment which is locked and sealed. Locks and seals shall be periodically inspected in transit, if accessible, by an escort or crew member. A the peneriou at the
- (c) Export shipments shall be escorted by an unarmed authorized individual, who may be a crew member, from the last port in the United States until the shipment is unloaded at a foreign port. He shall perform monitoring duties at foreign ports as described in § 73.35. 22 - described in § 73.35.
- (d) Ship-to-shore communications shall be available, and a ship-to-shore contact shall be made every twenty-four hours to relay position information, and the status of the shipment, which shall be determined by a daily inspection where possible. This information shall be sent, as often as it is available, to the licensee or his agent who makes the arrangements for the protection of the shipment.

  (e) This section is effective March 6, 1974.

Sec. 73.34 as added November 6, 1973, effective March 6, 1974 (38 F. R. 30536); republished December 28, 1973 (38 F. R. 35433).] Silver and the second of the s

‡ Sec. 73.35. Transfer of special nuclear material.—All transfers shall be monitored by a guard. An alternate guard shall be designated at all transfer points to substitute, if necessary. Monitoring of special nuclear material transfers shall be conducted as follows: transfers shall be conducted as follows:

(a) At scheduled intermediate stops where special nuclear material is not scheduled for transfer, the guard shall observe the opening of the cargo com-

† The Atomic Energy Commission gave notice in the Federal Register of November 13, 1974 (39 F. R. 40038) that it is considering amending § 73.34 by deleting paragraph (e) and revising paragraphs (a), (b), and (c) to read as follows: "(a) Shipments shall be made on American flag vessels making the minimum ports of call. Transfers to and from other modes of transportation shall be in accordance with § 73.35, except that such guards need not be armed at foreign terminals. eign terminals.

(b) Export shipments shall be accompanied by two guards from the last port in the United States until the shipment is unloaded at a for-eign port. They shall perform mostoring

duties at foreign ports as described in § 73.35, except that such guards need not be armed at

foreign terminals. "(c) The shipment shall be placed in a secure compartment which is locked and sealed. Locks and seals shall be periodically inspected in tran-

and seals shall be periodically inspected in transit, if possible, by the two guards."

The Atomic Energy Commission gave notice in the Federal Register of November 13, 1974 (39 F. R. 40038) that it is considering amending \$73.35 by deleting paragraph (d) and revising paragraphs (a) and (b) to read as follows:
"All transfers shall be monitored by two guards. Monitoring of special nuclear material transfers shall be conducted as follows:

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¶ 9312 10 CFR § 73.34

partment and assure that the shipment is not removed. The guard shall maintain continuous visual surveillance of the cargo compartment. Continuous visual surveillance of the cargo compartment shall be maintained up to the time the vehicle is ready to depart. The guard shall observe the vehicle until it has departed, and shall notify the licensee or his agent of the latest status immediately thereafter.

- (b) At points where special nuclear material is transferred from a vehicle to storage, from one vehicle to another, or from storage to a vehicle, the guard shall keep the shipment under continuous visual surveillance by observing the opening of the cargo compartment of the incoming vehicle and assuring that the shipment is complete by checking locks and/or seals. Continuous vessel surveillance of a shipment shall be maintained at all times it is in the terminal or in storage. Shipments shall be preplanned in order to avoid storage times in excess of 24 hours. Continuous visual surveillance of the cargo compartment shall be maintained up to the time the vehicle is ready to depart from the terminal. The guard shall observe the vehicle until it has departed, and shall notify the licensee or his agent of the latest status immediately thereafter.
- (c) The guard shall be required to immediately notify the carrier and the licensee who made the arrangements for protection of special nuclear material of any deviation from or attempted interference with schedule or routing. of a viologo and the territors

(d) This section is effective March 6, 1974.

[Sec. 73.35 as added November 6, 1973, effective March 6, 1974 (38 F. R. 30536); republished December 28, 1973 (38 F. I. 35433).]

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Sec. 73.36. Miscellaneous requirements.—(a) Each licensee who takes delivery of special nuclear material free on board (f. o. b.) the point at which it is delivered to a carrier for transport shall make the arrangements to assure that such special nuclear material will be protected in transit as prescribed in §§ 73.30 through 73.35, rather than the person who delivers such shipment Contract of to the carrier for transport.

(b) E ch licensee who imports special nuclear material shall make arrangements to assure that such material will be protected in transit as follows:

(1) An individual designated by the licensee or his agent, or as specified by a contract of carriage, shall confirm the container count and examine locks and/or seals for evidence of tampering, at the first place in the United States at which the shipment is discharged from the arriving carrier.

(2) The shipment shall be protected at the first terminal at which it arrives in the United States and all subsequent terminals as provided in §§ 73.30 through 73.35 and paragraphs (c) and (f) of this section.

(c)(1) Each licensee who delivers special nuclear material to a carrier for transport shall immediately notify the consignee by telephone, telegraph,

"(a) At scheduled intermediate stops where special nuclear material is not scheduled for transfer, the guards shall observe the opening of the cargo compartment and assure that the shipment is not removed. The guards shall maintain continuous visual surveillance of the cargo compartment shall be maintained up to the time the vehicle is ready to depart.

depart.
"(b) At points where special nuclear material is transferred from vehicle to storage, from one vehicle to another, or from storage to a vehicle,

the guards shall keep the shipment under con-tinuous visual surveillance by observing the opening of the cargo compartment of the incomopening of the cargo compartment of the incoming vehicle and assuring that the shipment is complete by checking locks and/or seals. Continuous visual surveillance of a shipment shall be maintained at all times it is in the terminal or in storage. Shipments shall be preplanned in order to avoid storage times in excess of 24 hours. Continuous visual surveillance of the cargo compartment shall be maintained up to the time the vehicle is ready to depart from the the time the vehicle is ready to depart from the terminal."

> 1 9314 10 CTR § 73.35

Nuclear Regulation Reports

or teletype, of the time of departure of the shipment, and shall notify or confirm with the consignee the method of transportation, including the names of carriers, and the estimated time of arrival of the shipment at its destination.

(2) In the case of a shipment free on board (f. o. b.) the point where it is delivered to a carrier for transport, each licensee shall, before the shipment is delivered to the carrier, obtain written certification from the licensee who is to take delivery of the shipment at the f. o. b. point that the physical protection arrangements required by §§ 73.30 through 73.35 for licensed shipments have been made. When a contractor exempt from the requirements for a Commission license is the consignee of a shipment, the licensee shall, before the shipment is delivered to the carrier, obtain written certification from the contractor who is to take delivery of the shipment at the f. o. b. point that the physical protection arrangements required by ERDA Manual or NRC Manual Chapters 2401 or 2405, as appropriate, have been made.

(3) Each licensee who delivers special nuclear material to a carrier for transport or releases special nuclear material f. o. b. at the point where it is delivered to a carrier for transport shall also make arrangements with the consignee to be notified immediately by telephone and telegraph or teletype of the

arrival of the shipment at its destination.

(d) In addition to complying with the requirements specified in paragraphs (c) and (f) of this section, each licensee who exports special nuclear material shall comply with the requirements specified in §§ 73.30 through 73.35, as applicable, up to the first point where the shipment is taken off the vehicle outside the United States. The licensee shall also make arrangements with the consignee to be notified immediately by telephone and telegraph, teletype, or cable, of the arrival of the shipment at its destination, or of any such shipment that is lost or unaccounted for after the estimated time of arrival at its destination.

- (e) Each licensee who receives a shipment of special nuclear material shall immediately notify by telephone and telegraph, mailgram, or facsimile, the person who delivered the material to a carrier for transport and the Director of the appropriate Nuclear Regulatory Commission Inspection and Enforcement Regional Office listed in Appendix A of the arrival of the shipment at its destination. When an Energy Research and Development Administration (ERDA) licenseexempt contractor is the consignee, the licensee who is the consignor shall notify by telephone and telegraph, mailgram, or facsimile, the Director of the appropriate Nuclear Regulatory Commission Inspection and Enforcement Regional Office listed in Appendix A of the arrival of the shipment at its destination immediately upon being notified of the receipt of the shipment by the license-exempt contractor as arranged pursuant to paragraph (c)(3) of this section. In the event such a shipment fails to arrive at its destination at the estimated time, the consignee, if a licensee, or in the case of an export shipment, the licensee who exported the shipment, shall immediately notify by telephone and telegraph, mailgram, or facsimile, the Director of the appropriate Nuclear Regulatory Commission Inspection and Enforcement Regional Office listed in Appendix A of this part, and the licensee or other person who delivered the material to a carrier for transport. The licensee who made the physical protection arrangements shall also immediately notify by telephone and telegraph, mailgram, or facsimile, the Director of the appropriate Nuclear Regulatory Commission Inspection and Enforcement Regional Office listed in Appendix A of the action being taken to trace the shipment.
- (f) Each licensee who makes arrangements for physical protection of a shipment of special nuclear material as required by §§ 73.30 through 73.36 shall immediately conduct a trace investigation of any shipment that is lost or unaccounted for after the estimated arrival time and file a report with the

¶ 9314 10 CFR § 73.36

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Commission as specified in §73.71. If the licensee who conducts the trace investigation is not the consignee, he shall also immediately report the results of his investigation by telephone and telegraph, or teletype to the consignee.

(g) Paragraphs (a), (b), and (c), and (d) of this section are effective arte source it of a

March 6, 1974.

[Sec. 73.36 as added November 6, 1973, effective March 6, 1974 (38 F. R. 30536); republished December 28, 1973 (38 F. R. 35434); amended effective March 3, 1975 (40 F. R. 8793); amended November 13, 1975; effective December 15, 1975 (40 F. R. 52841); amended effective April 19, 1976 (41 F. R. on alto all or circles adver 16447).]

# PHYSICAL PROTECTION REQUIREMENTS AT FIXED SITES 1977 on in 19 [[ 9315] | 12 mainted to 1

Sec. 73.40. Physical protection: General requirements at fixed sites .-Each licensee shall provide physical protection against industrial sabotage and against theft of special nuclear material at the fixed sites where licensed activities are conducted. -Security plans submitted to the Atomic Energy Commission for approval shall be followed by the licensee after March 6, 1974.

[Sec. 73.40 as added November 6, 1973, effective December 6, 1974 (38 F. R. 30540); amended effective March 3, 1975 (40 F. R. 8793).]

acourb en camelinari de lisas focus acometación de mediant lanega, contra escribida en deconoción de la companión (1868) [1868] (1868) en companión de la comp \*Sec. 73.50. Requirements for physical protection of licensed activities .-In addition to any other requirements of this part, each licensee who is authorized to operate a fuel reprocessing plant pursuant to Part 50 of this chapter or who possesses or uses uranium-235 (contained in uranium enriched to 20 percent or more in the U-235-isotope), uranium-233, or plutonium alone or in any combination in a quantity of 5000 grams or more computed by the formula, grams = (grams contained U-235) + 2.5 (grams U-233 + grams plutonium), other than in the operation of a nuclear reactor licensed pursuant to Part 50 of this chapter, shall comply with the following after March 6, 1974.

(a) Physical security organization. (1) The licensee shall establish a security organization, including guards, to protect his facility against industrial sabotage and the special nuclear material in his possession against theft.

(2) At least one supervisor of the security organization shall be on site at all times.

(3) The licensee shall establish, maintain and follow written security procedures which document the structure of the security organization and which detail the duties of guards, watchmen, and other individuals responsible for security.

(4) The licensee shall not permit an individual to act as a guard or watchman unless such individual has been properly trained and equipped and

The Atomic Energy Commission gave notice in the Federal Register of November 13, 1974 (39 F. R. 40038) that it is considering amending \$73.50 by revising the prefatory language to

read as follows:
"In addition to any other requirements of
this part, each licensee who is authorized to
operate a fuel reprocessing plant pursuant to operate a ruel reprocessing plant pursuant of this chapter or who possesses or uses uranium-235 (contained in uranium enriched to 20 percent or more in the U-235 isotope), uranium-233, or plutonium alone or in any combination in a quantity of 5,000 grams or more computed by the formula, grams = (grams contained U-235) + 2.5 (grams U-233 + grams piutonium), including licensees who are authorized to operate a nuclear reactor pursuant to Part 50 of this chapter who possess or store such material shall comply with the following requirements. The requirements of this section do not apply to reactor licensees who possess such material only when it is inserted or located in the core of a nuclear reactor and/or who possess or store such material only when it is contained in irradiated fuel elements removed contained in irradiated fuel elements removed from the reactor core."

> 9 9316 10 CFR § 73.50

Nuclear Regulation Reports

# UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

Docket No. 75-6115 Docket No. 76-6022 Docket No. 76-6081

THE STATE OF NEW YORK,

Plaintiff-Appellant

-against-

THE NUC EAR REGULATORY COMMISSION, et al.,

Defendants-Appellees.

APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK

ERRATA TO THE BRIEF FOR PLAINTIFF-APPELLANT

The following corrections should be made to the Brief of Plaintiff-Appellant, State of New York:

Page	Line	Corrections
1		Change Docket No. 75-6002 to "76-6022"
3	1st para., line 2	Change "other" to "major"
5	12	Insert comma after "Guidelines"
16	lines 1-2 footnote	Change "incompetency" to "incompetence"
22	9 10	Change "inhalf" to "inhale" Change "meterorological" to "meteorological"
	15	Change "disposal" to "dispersal"
29	9	Change "are" to "were"
32	16	Change Rule "76(6)" to "76(a)"
33	second to last line	Change to "preliminary"
34	line 7 of quote	Change "an/" to "and"
53	1st para., line 4	Change "injuy" to "injury"
58	1	Delete "shipment"
63	17	Change "which" to "with"
67	2nd para., line 4 line 10	Change "National" to "Natural" Change "380,00" to "380,000"
69	7	Change "import" to "impact"
72	1st para., line 3	Insert "the" after "of"
73	last line	Delete "study" and insert "topic will require."
74	12	Cite should be "40 Fed. Reg. 23768 "
78	last line	Delete "2nd"
79	15	Change "pleads" to "pleas"

#### TABLE OF AUTHORITIES

piii "Lyons v. Weinberger, 376 F. Supp. 348 (SDNY, 1974)

piii "Natural Resources Defense Council, Inc. v. Morton, 458 F.2d 827 (D.C. Cir., 1972)
. . . 53, 67"

#### p. v Miscellaneous

Item 3 - Change to "40 Fed. Reg. 23768 (1975)"

Item 6 - Delete "70"

## CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing ERRATA TO THE BRIEF FOR PLAINTIFF-APPELLANT was served upon counsel for defendants-appellees by mail, postage prepaid, this 17th day of June, 1976.

JOHN F. SHEA III

Assistant Attorney General

OTHER NUMBER DEM. N/S 0 S YR. 23 NUMBER MO. DAY YEAR DIST/OFFICE NUMBER YR. 0861 2121 05 75 2 893 75 2121 208-I DEFENDANTS PLAINTIFFS CONNER, THE NEW REGULATORY COMMISSION, AND THE STATE OF NEW YORK WILLIAM ANDERS AS CHAIRMAN: THE ENERGY RESEARCH AND DEVELOPMENT AD-MINISTRATION AND DR. ROBERT C. SEAMANS AS THE ADMINIS-TRATOR. THE DEPARTMENT OF TRANSPORTATION, AND WILLIAM T. COLEMAN AS SECRETARY OF TRANS PORTATION: THE DEPARTMENT OF STATE AND HENRY A. KISSINGER AS SECRETARY OF STATE DISM-17/73/75 -> THE CIVIL AERONAUTICS BOARD, AND DIS-17/2/75 ROBERT D. TIMM AS THE CHAIRMAN, THE FEDERAL AVIATION ADMINISTRATION, AND ALEXANDER P. BUTTERFIELD AS THE CHAIRMAN DISM-1-->275>THE UNITED STATES CUSTOM SERVICE, AND DISM-IV/VERNON B. ACPET AS COMMISSIONER AND DISMICAUSE FRED R. BOYETT AS REGIONAL COMMISSIONER. ACTION UNDER NATIONAL ENVIRONMENTAL POLICY ACT OF 1969. ATTORNEYS ATTORNEY GENERAL OF THE STATE OF NEW YORK U.S. ATTORNEY (X - 1977)TWO WORLD TRADE PLAZA, for defts. Muclear Regulatory Commission NEW YORK, N.Y. 10047 and William Anders as Chairman, "ERDA"; 488-7562 and Dr. Robert C. Seamans as Administrat Dept. of Transportation and William T. Coleman as Sec'y of Transportation,

Dept. of State and Henry A. Kissinger as Sec'y, Federal Aviation Administration and James E. Dow as Acting Administrator

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75 C1v	2777	THE STATE	Ct 11211 1 2 1111						ru.

DATE'	NR.	PROCEEDINGS
05-05-75	1	Filed Complaint, Issued Summons.  Filed Order appointing Peter N. Skinner, Walter Morris and Merrill Kraines, to serve the summons and complaint in the above entitled action. Clerk.
×		men and neturns served the fellowing:
05-12-75		6-06-75 U.S. Atty. by Ralph -ce on 05-06-75 Atty. General by Reg. mail # 162hlus on 05-66-75
-	•	Vernen B. Acree by cert. mail # 162hk3, em 05-06-75 William T. Coleman as Sec y of Transportation by cert. mail # 162k36 on 95-00-75
		Henry A. Kissinger, Secly of State by cert. Emil # 162437 pm 05-06-75  Dept. of State, Office of Legal Advisor by cert. mail # 162438 en 05-06-75  William Anders by cert. mail of 162442 en 05-06-75
i in the		Department of Transportation- General Counsel by cert. mail # 162439
		Phorgy Research & Povelement Admin by cert. mail # 162441 on 05-06-75
		Civil Aerenautics Board by cert. mail # 162435 en 05-86-75
'		Alexander P. Butterfield by cert. mail # 162433 en 05-06-75
1	ŧ	Dr. Robert C. Sesmans by cert. mail # 162440 en 05-06-75  Robert D. Timm by co., mail # 162434 en 05-06-75
	2	U.S. Customs Service by cert. mail # 162432 en 05-06-75
05-29-75	4	Filed affdyt. of service by an individual/summons, complaint for declaratory and injunctive relief, verification, etc. and other papers indicated—served the following:  Melvin H. Greenberg, Regional Counselner Customs on 05-05-75  Attorney for Fred R. Boyett, Reginal Commissioner of U.S. Custom Services on 05-05-75
05-29-75	5	Filed affdvt. of service by an individual of summons, complaint for declaratory and injunctive relief, verification, etc. and other paners as indicated—served the following:
		Morton White, Counsel for Federal Aviation Agency on 05-05-75 Attorney for Federal Aviation Agency on 05-05-75
06-2-75	6	Filed Affidavit of (Aus C.F. Richter)in opposition to pltffs motion for a preliminary injunction etc, as indicated.
06-09-7	\$ 7	Filed defts' memorandum of law in opposition to pltff's motion for a preliminary
06-25-75		Filed pltff's memorandum of law in support of motion for preliminary injunctions
7/31/75		Filed transcript of record of proceedings, dated May 7,1975.
08-05-75	10	- C. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
08-06-7	75 1	Filed ANSWER of defts. "MRC" and William Anders as Chairman "ERDA" and Dr. Robert C. Seamans as Administrator, Dept. of Transportation and William T. Coleman
		as Sec'y of Transportation, Dept. of State and Henry A. Kissinger as Sec'y, Federal Aviation Administration and James E. Dew as acting Administrator to the complaint

(PAGE # 3)

D. C. 110 Rev. Civil Docket Continuation

CONNER, J.

PATE	PROCEEDINGS
08-06-75	(12) Filed one (1) large manila envelope sealed. So ordered- KNAPP. J.
08-15-75	(13) Filed defts. the U.S. Civil Service Commission and the U.S. Customs Service
	netice of motion for an order pursuant to FRCP Rule 12 (b) dismissing the
	complaint with respect to said defts. Ret8-28-75.
08-15-75	(14) Filed memorandum of law in support of defts' motion to dismiss complaint with respect to the Civil Aeronautics Board and the U.S. Customs Service.
09-03-75	(15) Filed stip & order that the return date of defts. Civil Aeronautics Board
	and United States Customs Service motion to dismiss the complaint with
	respect to them is adjourned to 09-05-75. So ordered- CONNER, J.
09-08-75	(16) Filed Affdyt. of John F. Shea in opposition to the motion of the Civil
	Aeronautics Board and the Unites States Custom Service to dismiss the
6-22-25	complaint.
09-08-75	(17) Filed Pltff's memorandum of law in opposition to motion of Civil
	eronautics Board and United States Customs Service to dismiss the Complaint.
09-09-75	(18) Filed memorandum and order #43044 This action under the National Environmental
27-11-11	Policy Act charges defts with having violated 42 ILS.C. 4321***presently before
	Policy Act charges defts with having violated 42 U.S.C. 4321***presently before the Court is a motion pursuant to Rule 65 for a preliminary injunction retraining
	defts from transporting SNM from to and over the U.S. and its territories, pendin
	the determination of this action ***The motion for a preliminary injunction is
9-18-75	Filed transcript of record of proceedings, lated Fully 31, 1975
9-22-75	Filed transcript of record of proceedings, Juted July, 25 1975.
9-22-75	Hed transcript of record of proceedings light lady 20' 1975.
10-24-75	Filed Pltff's Affiderite and Order to Show Cause and Temporary Re-
	Filed Pltff's Affidavits and Order to Show Cause and Temporary Restraining order etc.Ret: 05-22-75 10AM Rm.2703
10-24-75	Filed Fitti's Ailidavit correcting certain allumetical error etc.
	& in support of Pltff's motion. by John W. Cofman.
10-24-75	Filed Pltff's Affidavit in support of motion for preliminary in-
	junction. by John F. Shea, III
10-24-75	Filed Deft U.S. Nuclear Regulatory Commission's Affidavit in oppositi
	to Pltff's motion for a preliminary injunction.
11-07-75	Filed pltff's notice of appeal to USCA from order entered on 09-09-75 which deni
	in all respects pltff's motion for preliminary injunctive relief. Copy to:
	U.S. Atty. for S.D. of N.Y. ent. 11-10-75
Dec. 12-	
20 70 7	injunction and for summary judgment. Het. 12-24-75.
Dec. 12-7	
Dec. 12-75	and motion for surmary judgment. Filed pltff's Statement pursuant to Rule 9(g) of General Rules.
-	
Dec. 12-7	Filed affdvt. of Theodore T. Mason and Robert R. Leamer in support of pltff's
Dec. 12-75	motion for a preliminary injunction and motion for summary judgment. Filed affect. of Capt. James A. Eckols in support of the State of N.Y. s motion
	for a preliminary injunction and motion for summary judgment.
12-12-75	Filed Order extending time to transmit record to Appellate Court
	to 92-05-75.CONNER, J (m-n)
12-23-75	Filed Filed Memorandum-Decision and Order- Opinion # 43591for the reasons
	set forth, defts' the Civil Aeronautics Board and the United States
36)	Customs Service motion to dismiss those portions of the complaint that
	are directed against them is granted . So ordered- CONNER, J. (m/n)
1-12-76	Filed defts' memorandum of law in opposition to pltff's motion of 12-12-75
	for a preliminary injunction and for partial summary judgment.
	,
	(CONT'D - PG. # 4 - OTHER SIDE)
	1018
	1010

PROCEEDINGS	Judgment Noted
Filed pltff's memorandum of law in further support of motion for preliminary	injunction
and motion for summary judgment.	
Filed pltff's affdvt. of Theodore T. Mason and Robert R. Teamer in further	
support of pltff's motions.	
Filed pltff's affdvt. of John F. Shea, III, in further support of pltff's mo	otions
for a preliminary injunction and summary judgment.	
for a preliminary injunction and summary judgments	or a
Filed defts' affdyt. of 'ack fdlow in opposition to N.T. State's motion for	
preliminary injunction.  Filed stipulation between parties on contents of the record re: affects.	
of service of the summon and complaint, etc. upon ried it.	n the
egional Commissioner of the Care Care	
Federal Aviation Administration on 8-5-75	2 75
Filed pltff's notice of appeal to the USCA from the order entered on 12-2	and and
the state of the s	V6. 170 11
Filed stin worder for retention of record of their and the still	The shall be a second
injunctive relief by District Court C era pursuant to make I to Fi	
So ordered- COMNER, J.	C
Filed stipulation between the parties for retention of record by District	Lourt
71 + +- 0.1- 11/-1 0040	
Filed stip order of corrections to transcripts. 30 ordered- CONNER, d.	
Filed Memorandum and Order- Oninion + 144365 for the reasons stated, in	this case
pltff. is not seek ng a stay pending appeal, but rather seeks to reopen	1 Title
Court's prior decision. Moreover, the relief pluff, requests would like	LY
most the pending appeal. Under these circumstances, the rationale of Id	nal
Tow demands that, before the evidentiary tearing referred to above is	held,
leave should be obtained from the Court of Appeals which, in its discr	retion,
can suspend proceedings while new matter is introduced before this Cou	rte
A date for an evidentiary hearing will be set immediately upon notici	cation
by pltff that the Court of Appeals has granted leave to proceed.	
So ordered CONNER H ( m/n)	
Filed pltff's notice of appeal to the USOA from each and avery part of t	he -
order entered on 05-07-76. Copy mailed to: 1. Attorney, of A	1.Y.
ent. 5-12-76  Filed Draft Environmental Statement on the Transportation of Radioactive	Material
Filed Draft Environmental Statement on the Transportation of the 1976	
by Air and Other Modes -Docket No. PR-71,73 (NO FR 23768) March 1976	ds
by Air and Other Modes -Docket No. PR-71,75 (do In Defice of Standar prepared by the U.S. Nuclear Regulatory Commission Office of Standar	
Development.	
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488-7562

July 24, 1975

Hon. William C. Conner United States District Judge U.S. Courthouse Foley Square New York, New York 10007

> Re: State of New York v. Nuclear Regulatory Commission, et al. 75 Civ 2121 (WCC)

Dear Judge Conner:

On May 5, 1975, we filed the summons and complaint in the above-mentioned action, which was assigned to Your Honor. On the same day we asked that the Court set a date for argument on our motion for a temporary restraining order against defendants. On the appointed day, May 7, the Court denied the motion but signed an order to show cause bringing on a motion for a preliminary injunction against defendants.

The last affidavits which have been submitted to the Court on the preliminary injunction motion were served on June 16, 1975, and filed shortly thereafter and the last memorandum of law was served on June 24, 1975, and filed on the following day, approximately one month ago. The Court has indicated that it will decide the motion on the papers submitted unless an evidentiary hearing is necessary. Transcript of Conference, July 3, 1975, pp. 18-19, 26a. The Court also indicated on July 3, 1975, that it had not yet been able to read all of the affidavits. Id., p. 3.

In a conversation with Your Honor's clerk on July 18, 1975, it was ascertained that Your Honor presently is assigned to the duties of the Part I judge and that thereafter

To: Hon. William C. Conner July 24, 1975
Re: State v. NRC -2-

Your Honor is scheduled for vacation leave during at least the first two weeks of August.

We respectfully request that, if the Court is unable to make whatever determination it deems appropriate on the papers before its vacation, the case be reassigned to a judge who will be able to make a prompt determination. On May 12, 1975, in a somewhat similar context, the Court stated that it would inquire whether Hon. Frederick Van Pelt Bryan might be willing to accept reassignment of the case to avoid delay. At that time we indicated that reassignment for such a purpose would be in the public interest. We believe that this suggestion by the Court is appropriate in the present context as well.

We respectfully request that, if Judge Bryan does not accept the real signment, Your Honor ask the Assignment Committee to reassign this case. Rule 4(C) of the Individual Assignment and Calendar Rules for the Southern District provides that, immediately after assignment of cases to a judge, the Assignment Committee shall identify cases "which are likely to be subject to delays and which, because of exceptional and special circumstances, demand extraordinary priority, prompt disposition, and immediate judicial supervision in the public interest." The Rule further provides that the Assignment Committee shall advise the judge to whom such a case has been assigned that the case requires extraordinary priority and a prompt trial or other disposition within 60 days and that, if a judge so notified cannot afford the case the required priority, the case shall immediately be reassigned.

The relief which plaintiff is requesting herein is somewhat more modest than that provided in Rule 4(C). At this point we are merely asking that the case be reassigned to a judge who will be able to give the preliminary injunction motion priority and prompt disposition.

JFS:rab

JOHN F. SHEA, III
Assistant Attorney General

CC: Charles F. Richter, Esq.
Assistant U.S. Attorney

BY HAND

certainly the public interest, and specifically public safety, requires a prompt determination of the preliminary injunction motion here, where plaintiff seeks to preliminary enjoin and sunul all present and future licenses, approvals and other actions of defendants in permitting or executing the transport by air of plutonium and other special nuclear materials because of defendants' failure to file environmental impact statements as required by law.

To: Hon. William C. Conner

State v. NRC

Rei

Respectfully yours,

July 24, 1975

LOUIS J. LEFKOWITZ Attorney General By UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

THE STATE OF NEW YORK,

•

Plaintiff,

-against-

The Nuclear Regulatory Commission, and WILLIAM ANDERS as Chairman; the Energy Research and Development Administration and DR. ROBERT C. SEAMANS as the Administrator; the Department of Transportation, and WILLIAM T. COLEMAN as Secretary of Transportation; the Department of State and HENRY A. KISSINGER as Secretary of State; the Civil Aeronautics Board and ROBERT D. TIMM as the Chairman; the Federal Aviation Administration and ALEXANDER P. BUTTERFIELD as the Chairman; the United States Customs Service and VERNON B. ACREE as Commissioner and FRED R. BOYETT as Regional Commissioner,

: 75 Civ 2121 (WCC)

: NOTICE OF MOTION FOR PRELIMINARY INJUNCTION AND : MOTION FOR SUMMARY JUDGETIC

Defendants.

PLEASE TAKE NOTICE that, upon the affidavit of John F. Shea, III, Esq., sworn to December 11, 1975, the affidavit of Captein James A. Eckols, sworn to November 28, 1975, the affidavit of Theodore R. Mason and Robert R. Leamer, sworn to November 30, 1975, the complaint verified May 5, 1975, the affidavit of John F. Shea, III, sworn to May 1, 1975, the supplemental affidavit of John F. Shea, III, Esq., sworn to May 2, 1975, the certificate of John F. Shea, III, Esq., sworn to May 6, 1975, the affidavit of Peter N. Skinner, sworn to April 29, 1975, the supplemental affidavit of Peter N. Skinner, sworn to May 2, 1975, the affidavit of Marvin Resnikoff, sworn to April 25, 1975, the Affidavit of John F. Shea, III, Esq., sworn to June 16, 1975, the affidavit of Karl 2. Morgan, sworn to June 6, 1975, the affidavit of Irving Pinkel, sworn to June 10, 1975, the affidavica of Dr. John W. Gofman, sworn to June 10, 1975, and July 21, 1975, the affidavit of Dr. Seville Chapman, sworn to June 11, 1975,

the affidavit of Marvin Resnikoff, sworn to June 12, 1975, the affidavit of Peter N. Skinner, sworn to June 13, 1975, the affidavit of Theodore Mason and Robert R. Leamer, sworn to June 16, 1975, the affidavit of John F. Shea, III, Esq., sworn to July 31, 1975, the affidavit of Peter N. Skinner, sworn to July 31, 1975, and the letters, with enclosures, of John F. Shea, III, to the Court, dated June 24, 1975, July 17, 1975, July 24, 1975, August 20, 1975 and September 5, 1975, and upon all pleadings and prior proceedings had herein, plaintiff will move this Court in the United States Courthouse, Room 3006, Foley Square, New York, on December 24, 1975, at 10:00 o'clock in the forenoon, for an order, pursuant to Rule 65(a) of the Federal Rules of Civil Procedure, preliminarily enjoining, annulling, and setting aside, pending the final determination of this action, all present and future licenses, approvals and other actions of defendants, their agents, servants, employees, attorneys and all persons in active concert and participation with them which, directly or indirectly, permit or execute the transport by air and related connecting transport of plutonium and the commercial transport by air and related connecting transport of enriched uranium (other than uranium enriched in the isotope U-233) to, from, in and over the City and State of New York and the United States and its territories and directing defendants to forthwith instruct nuclear materials shippers, air and other carriers, and other persons and entities procuring or executing such transport that such preliminary injunction is in effect, and for summary judgment, pursuant to Rule 56(a) of the Federal Rules of Civil Procedure, which declares that defendants' actions in licensing, approving, allowing and executing, directly or indirectly, the transportation by air and related connecting transport of special numlear materials without having prepared,

circulated for comment and filed adequate Environmental Impact Statements concerning the transport of all special nuclear materials to, from, in, or over the City and State of New York and the United States and its territories are in violation of the National Environmental Policy Act, 42 U.S.C. \$ 4321, et seq., and the Council on Environmental Quality Guidelines, 40 C.F.R. § 1500, et seq., and which directs that defendants make available a draft generic Environmental Impact Statement concerning the transport of all special nuclear materials to, from, in or over the City and State of New York and the United States and its territories on or before December 31, 1975, that defendants hold hearings thereon during March 1976 in various parts of the country, including New York City, and accept comments thereon through March 31, 1976, and that defendants file an adequate final generic Environmental Impact Statement concerning the transport of all special nuclear materials to, from, in or over the City and State of New York and the United States and its territories on or before June 21, 1976, and for such other and further relief as to this Court may seem just and proper.

Dated: New York, New York December 12, 1975

Yours, etc.,

LOUIS J. LEFKOWITZ Attorney General of the State of New York Attorney for Plaintiff

By

JOHN F. SHEA, III

Assistant Attorney General Office & P.O. Address Two World Trade Center New York, New York 10047 Tel. No. (212) 488-7562

lea or

TO: THOMAS J. CAHILL
United States Attorney for the
Southern District of New York
One St. Andrew's Plaza
New York, New York 10007

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

THE STATE OF NEW YORK,

Plaintiff,

----X

-against-

The Nuclear Regulatory Commission, and WILLIAM ANDERS as Chairman; the Energy Research and Development Administration and DR. ROBERT C. SEMANS as the Administrator; the Department of Transportation, and WILLIAM T. COLEMAN as Secretary of Transportation; the Department of State and HENRY A. KISSINGER as Secretary of State; the Civil Aeronautics Board and ROBERT D. TIRM as the Chairman; the Federal Aviation Administration and ALEMANDER P. BUTTERFIELD as the Chairman; the United States Customs Service and VERNON B. ACREE as Commissioner and FRED R. BOYETT as Regional Commissioner,

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: 75 Civ 2121 (MCC)

STATEMENT PURSUANT
TO RULE 9(d) OF THE
GENERAL RULES OF
THE UNITED STATES
DISTRICT COURT

Defendants.

Plaintiff contends that there is no genuine issue to be tried with respect to the following facts material to the motion for summary declaratory judgment and summary judgment in the nature of mandamus: 1) defendants' actions in licensing, approving, allowing and executing, directly or indirectly, the transportation by air and related connecting transport of special nuclear materials are major federal actions significantly affecting the quality of the human environment and 2) defendants have not prepared, circulated for comment and filed adequate Environmental Impact Statements concerning the transport of all special nuclear materials to, from, in, or over the City and State of New York and the United States and its territories as required by the National Environmental Policy Act, 42 U.S.C.

Guidelines, 40 C.F.R. § 1500, et seq.

Dated: New York, New York December 12, 1975

LOUIS J. LEFKOWITZ
Attorney General of the
State of New York
Attorney for Plaintiff
Two World Trade Center
New York, New York 10047
Tel. No. (212) 483-7562

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UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

THE STATE OF NEW YORK,

Plaintiff,

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AFFIDAVIT IN SUPPORT OF MOTION FOR PRELIMINARY : INJUNCTION AND SURMARY JUDGMENT

-against-

THE NUCLEAR REGULATORY COMMISSION, et al.,

75 Civ. 2121 (WCC)

Defendants.

----X

STATE OF NEW YORK ) SS.: COUNTY OF NEW YORK)

JOHN F. SHEA, III, being duly sworn, deposes and says:

- 1. I am an Assistant Attorney General in the Environmental Protection Bureau of the New York State Department of Law and am assigned to this action. I make this affidavit in support of plaintiff's motion for a preliminary injunction and for summary judgment.
- 2. The State of New York is making the instant motion for a preliminary injunction notwithstanding the Court's previous denial of a motion for a preliminary injunction by an order dated September 9, 1975. In making the motion, we rely on all previous affidavits, letters and memoranda submitted to the Court in the action, as well as an additional affidavit by Theodore T. Mason and Robert R. Leamer, sworn to November 30, 1975, which we respectfully ask to be sealed, an affidavit by Captain James A. Eckols, sworn to November 28, 1975, and this affidavit. In this motion we seek to clearly set forth a distinction between the preliminary injunctive relief which we seek with regard to plutonium and that which we seek with regard to uranium, other than uranium enriched in the isotope U-233. U-233 is not a subject of the preliminary injunction motion because at present

1028

we are unaware of any immediate plans to transport such material by air.

- 3. Plaintiff continues to seek the cessation of all air transport and related connecting transport of plutonium, because the danger of dispersion of this highly toxic material in an aircraft accident poses a grave threat to human life quite apart from the threats of terrorism. As for the threat of terrorism regarding plutonium, the Mason, samer affidavit sworn to July 16, 1975, pointed out that military assisted surface transportation is significantly less vulnerable to terrorist acts than the present commercial air transport system.
- 4. With regard to uranium (other than uranium enriched in the isotope U-233), plaintiff seeks a lesser remedy, i.e., the cessation of all commercial air transport and related connecting transport. This lesser remedy is sought because such uranium materials do not present the same toxic threat as plutonium. Nevertheless, as indicated in the Mason/Leamer . affidavit sworn to June 16, 1975, and the affidavit of Peter N. Skinner sworn to July 31, 1975, uranium, like plutonium, could be fashioned into a practical nuclear explosive by terrorists. As also indicated in that Mason/Leamer affidavit, the commercial air transport system is highly vulnerable to terrorist interception of uranium. Finally, as indicated in the Mason/Leamer affidavit sworn to November 30, 1975, submitted herewith, military assisted transportation alternatives are far less vulnerable to such terrorist interception. Plaintiff particularly urges that alternative (1) suggested by Messrs. Mason and Leamer for the transport of uranium, i.e., the use of military airplanes flying between military airfields with short hauls by military helicopter, is appropriate (Mason/Leamer Affidavit, sworn to November 30, 1975, pp. 4-5).

- 5. In addition to clearly setting forth a distinction between the preliminary injunctive relief sought with regard to plutonium and that sought with regard to uranium, we submit in this motion additional facts, set forth in the Mason/Leamer and Eckols affidavits submitted herewith, which demonstrate the irreparable harm which may result from failure to grant the requested relief as to plutonium and uranium.
- 6. I should also point out that the Congressional bill which the Court described at page 10 of its opinion of
  September 9, 1975, as restricting air shipments of plutonium by the Energy Research and Development Administration ("ERDA") has not become law. On December 3, 1975, I spoke with John Bell,
  Legislative Aide to Congressman James H. Scheuer. Mr. Bell informed me that the ERDA legislation, to which the Jackson
  Amendment regarding ERDA's shipment of plutonium by air transport was added, had been held up in a Senate-House Conference
  Committee since early fall. The delay in that Committee, Mr. Bell noted, was not due to the Jackson Amendment, but rather due to other Senate amendments. On December 2, 1975, the Committee reached final agreement on all issues but the Report had not reached the House and Senate. The Report retains verbatim the language of the Jackson Amendment.
- 7. The State of New York is also making a motion for summary judgment which declares that defendants' actions in licensing, approving, allowing and executing, directly or indirectly, the transportation by air and related connecting transport of special n clear materials without having prepared, circulated for comment and filed adequate Environmental Impact Statements concerning the transport of all special nuclear materials to, from, in, or over the City and State of New York and the United States and its territories are in violation of the National Environmental Policy Act, 42 U.S.C. § 4321, et seq.

("NEPA"), and the Council on Environmental Quality Guidelines, 40 C.F.R. § 1500, et seq. ("CEQ Guidelines"). It is significant that, notwithstanding the defendants' statement in their memorandum of la of June 6, 1975, page 16, that they did not concede that an Environmental Impact Statement is required by NEPA, defendants failed to adduce one argument in the 47 page memorandum which is directed toward that issue. The memorandum as a whole, in effect did concede that defendants violated the law and concentrated solely on whether the preliminary injunctive relief ought to be denied for other reasons. Only defendants Civil Aeronautics Board and U.S. Customs Service later moved to dismiss the complaint and in their supporting memorandum of law (undated) asserted that they had not violated NEFA. At page 5 of that memorandum, however, they conceded that no facts were at issue. As demonstrated in plaintiff's opposing memorandum of law of September 5, 1975, on the facts admitted by defendant and on the law, these two defendants have also violated NEPA and the CEQ Guidelines. The motion to dismiss has not yet been decided.

8. The State of New York further moves that the summary judgment direct that defendants make available a draft generic Environmental Impact Statement concerning the transport of all special nuclear materials to, from, in or over the City and State of New York and the United States and its territories on or before December 31, 1975, that defendants hold hearings thereon during March 1976 in various parts of the country, including New York City, and accept comments thereon through March 31, 1976, and that defendants file an adequate final generic Environmental Impact Statement concerning the transport of all special nuclear materials to, from, in or over the City and State of New York and the United States and its territories on or before June 21, 1976. Such a direction by the Court is

required in order to ensure that the law will be complied with by a date certain. The date selected for making available a draft statement and for filing a final statement should not be burdensome to the defendants, since the Court noted at footnote 4 of its memorandum of September 9, 1975, that it had been represented to the Court that the draft would be available by the end of this year and the final by the summer of next year. The inclusion of dates for making available the draft and for hearings and the submission of comments by interested parties thereon is designed to assure that the date for filing the final statement will not be used as an excuse to curtail the extensive study and comment which a draft statement on this important topic will require.

9. On November 7, 1975, plaintiff filed a notice of appeal from the Court's order of September 9, 1975. The record on appeal is presently scheduled to be filed in the Court of Appeals on or before December 16, 1975. If the relief requested in the instant notice of motion is granted, prosecution of the appeal from the earlier order may not be necessary. If the relief requested in the instant notice of motion is denied and plaintiff appeals from that denial, it may be desirable to prosecute the two appeals simultaneously. Accordingly, plaintiff respectfully requests that the Court extend the time for transmitting the record on appeal to the Court of Appeals to and including February 5, 1976, pursuant to Rule 11(d) of the Federal Rules of Appellate Procedure.

JOHN F. SHEA, III

Sworn to before me this 11th day of December, 1975

Assistant Attorney General of the State of New York

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

THE STATE OF NEW YORK,

Plaintiff,

AFFIDAVIT

THE NUCLEAR REGULATORY COMMISSION, : et al.,

-against-

75 Civ. 2121

Defendants.

STATE OF NEW YORK )

: SS.:

COUNTY OF NEW YORK )

THEODORE T. MASON and ROBERT R. LEAMER, being duly sworn, depose and say:

#### Purpose of the Affidavit

- 1. This affidavit is submitted in support of plaintiff's motion for a preliminary injunction and motion for summary judgment, and is made with regard to the possibility of terriorist activities directed toward destruction or seizure of special nuclear material or SNM.
- 2. This affidavit augments and refines the affidavit of 16 June, 1975 submitted by Theodore T. Mason and Robert R. Leamer in support of the position that there is a substantial likelihood that a motivated, trained and equipped group of terrorists could be successful in destroying or seizing SNM in the course of its transportation by commercial air and related connecting ground services. The principal purposes of this affidavit are to address (1) the air transport of uranium as opposed to plutonium, (2) and the vulnerability of commercial air transportation systems currently employed industry-wide as compared to a variety of military assisted air transport systems. Plutonium constitutes a threat as a toxic dispersant and therefore a terrorist might well seek to

destroy a plane transporting it. On the other hand uranium, other than  $^{\mathrm{U}}233$ , constitutes a threat only as an explosive and requires a terrorist action plan of seizure and escape for later explosive deployment.

- 4. Each of the following military assisted transportation alternatives for enriched uranium is considered less vulnerable to terrorist action than current commercial practice. The least vulnerable alternative is presented first, the most, last:
  - (1) long haul military air cargo, leaving from and flying into a military airfield, and connecting with short haul military helicopter service between the airfield and the origin/ultimate destination;
  - (2) same as (1) but with military surface transport service between the airfield and the origin/ultimate destination;
  - (3) long haul commercial air cargo, leaving from and flying into a military airfield, and connecting with short haul military helicopter service between the airfield and the origin/ultimate destination;
  - (4) same as (3) but with military surface transport service between the airfield and the origin/ultimate destination;
  - (5) long haul commercial air cargo, leaving from and flying into a military airfield, and connecting with commercial surface(truck) service or commercial air(helicopter) service between the airfield and the origin/ultimate destination.

#### 5. Nature of the Threat

Since the terrorist objective will be to seize and escape
with the enriched uranium in contemplation of later actual or
threatened explosive deployment, he has only limited courses

of action:

- a. hijack the aircraft;
- b. theft at the airport;
- c. inception and theft between the airport and the origin/ultimate destination.

The threat of destruction of the long haul aircraft in the air, upon landing, or in parking position is minimal as it is quite unlikely to facilitate a uranium seizure and escape. Complete destruction of short haul transport, either air or surface, is also unlikely for the same reason. The uranium must be seized intact and not destroyed or lost in the process of bringing down the aircraft.

#### 6. Evaulation Criteria

In our affidavit of 16 June, 1975, the earlier planning steps and subsequent destructive employment steps were found to be within the capability of terrorists. Vulnerability of competing transport systems to the threat described in previous paragraphs can be assessed in terms of the relative likelihood of terrorist success in accomplishing steps (5) through (11) under paragraph 8 of our previous affidavit dated 16 June, 1975. These steps are:

- (5) acquisition of information on material location, protection and movement;
- (6) external penetration of facility (airport);
- (7) access to interim storage facility (if applicable);
- (8) control of vehicle (aircraft/truck);
- (9) access to container (or material);
- (10) manipulation of container (or material):
- (11) removal f material (from area/authorized control).

## 7. Assessment of Alternatives

A number of action plans which terrorists might implement to gain their objectives were identified in our affidavit dated 16 June, 1975. A transportation system alternative may be considered vulnerable if implementation of those or similar action plans are likely to allow a terrorist to effect the steps enumerated in paragraph 6 above.

8. A summary vulnerability assessment of each military assisted transportation system alternative described in paragraph (4) above is provided below. The commercial zir transport system currently employed industry-wide was found highly vulnerable in our affidavit of 16 June, 1975, and it is not reevaluated herein. Each military assisted transport system considered below is superior to (less vulnerable than) the current commercial system. Varying degrees of military assistance are evaluated in order to show that there is a range of policy options yielding varying degrees of lower vulnerability.

## Alternative (1) - All Military with Short Haul by Helicopter

- 9. Hijacking -- considered remote because the military cargo aircraft would load enriched uranium at and depart from a military airfield. Security at a military base is generally quite rigorous, making access to the base, and the airfield, and then the aircraft, rather difficult. Additionally, military communications can be made very secure, so that terrorist access to critical information on the nature and timing of enriched uranium movement would be quite difficult.
- 10. Destruction of long haul aircraft--not an appropriate action plan since a terrorist must take physical control of enriched uranium for later use in a homb.

and successfully escape before being apprehe..ded
(assuming cargo remains intact);

- -- the aircraft may fly over water in many instances
  to minimize both the land based ambush opportunities,
  as well as render difficult unauthorized recovery of
  enriched uranium if the aircraft went down.
  Additionally, the potential for crashing in
  populated areas is minimized;
- --aircraft (helicopter) may deliver enriched uranium directly into the destination's secured zone without interim use of even limited surface transport.

## Alternative (2) -- All Military with Short Haul by Convoy

- 13. This alternative preserves high security during the long haul transport and at the airport, but sacrifices the extreme flexibility of helicopters for the short haul transport. Relative to commercial surface transport, the military convoy advantages under this alternative are:
  - --avoidance of population centers associated with large commercial airports;
  - --information on planned convoys and actual movements are within military structure and hence are highly secure;
  - --military convoy practices anticipate ambushes and plan accordingly, making use of decoys, advance and rear guard escorts, deliberately erroneous movement information, adequate armed personnel, quick response assistance teams, etc.

Alternative (3) -- Commercial Long Haul Cargo Aircraft Using
Military Airfields with Military Air Transport for the Short Haul
Transit. Alternative (4) -- The same as (3) Except Using Military
Surface Transport for the Short Haul Transport.

14. These alternatives preserve a measure of security during long haul transport and at the airport, but increase the

possibility that planned movement information will be more widely disseminated and/or that inflight communications will be handled in a less secure manner.

It is anticipated that any commercial aircraft departing from a military field would be searched for stowaways prior to departure (to avoid hijacking) and would not land at any commercial field before unloading its enriched uranium cargo. Either military air (helicopter) or military convoy would be employed for the short haul transit, each with its attendant security posture.

Alternative (5) Commercial Long Haul Cargo Aircraft Using
Military Airfields with Commercial Air of Surface Transport for
the Thort Haul Transit.

15. This alternative preserves a measure of security during the long haul transport, and at the airport, but greatly increases the possibility of movement information (i.e. air and surface related) being more widely disseminated and/or subject to in-transit monitoring as more commercial interface is necessitated. Also short haul commercial ground or air transit is highly vulnerable for some on all the reasons set forth in our affidavit of 16 June, 1975 and below in paragraph 16.

#### Concluding Comment

- 16. Any of the military assisted transportation system alternatives presented are considered more secure than the current commercial practice. The military assisted alternatives to the present commercial air transport cycle for enriched uranium are less vulnerable to terrorist action because of:
  - less dissemination of movement information, vigorous information control;
  - (2) more secure in-transit communications;

- (3) personnel with security training and clearances;
- (4) appropriate selection of weapons and vehicles;
- (5) superior reaction capability;
- (6) physical remoteness of airfields and facilities;
- (7) reliable and highly motivated personnel;
- (8) psychological deterrent of a U.S. military protective force.
- 17. Although the entire affidavit thus far has addressed itself to enriched uranium transport, one comment regarding plutonium transport is worth making. A recent report by Ensign Dwight L. Gertz, USN, in Terrorist Weapons and the Terrorist Threat, "U.S. Naval Institute Proceedings," October, 1975, pp. 113, 114, confirms our conclusion expressed in our 16 June, 1975 affidavit that the terrorist motivation and threat to destroy aircraft is real and the weapons are readily available. In a recent instance, five Arabs rented an apartment in Ostia near Rome, 4 miles from Leonardo da Vinci Airport, directly underneath the North-South runway approach, and were only hours away from initiating a planned attack on a commercial airliner. They were equipped with two Russian made Grail missile launchers and a supply of missiles. In a second recent instance, when authorities were informed that terrorists in the Brussels area had been shipped Grail launchers, hundreds of troops were called out to cordon off airports in Brussels and London. The Grail is combat proven and available to Soviet supplied nations and some "neutral" countries. The missile is heat-seeking. The launcher is hand held and simple to use.

In-transit dispersion of plutonium oxide in many instances would be both a highly effective terrorist act and one of far lesser difficulty than seizure and escape. Hence the threat becomes one of destruction of the aircraft in order to breech the plutonium oxide containers and disperse their contents.

THEODORE T. MASON

ROBERT R. LEAMER

Sworn to before me this and day of November, 1975

#### Concents

Terrorise Weapons and the Terrorise Threat 113
By Ensign Dwight L. Gertz, U. S. Navy
Sharks: Navy Countermeasure Research 115.
By Captain Charles A. Barton, U. S. Navy (Retired)
Omega: A Scarus Report 118
By Captain Charles W. Koburger, Jr., U. S.
Coast Guard Reserve

#### Terrorist Weapons and the Terrorist Threat

By Ensign Dwight L. Gertz, U. S. Navy, Patrol Squadron Nine

Dozens of airlines and governments operate the big jets which take off from the airport in a steady stream. The departure of each is pinpointed by the tour of engines and the flashing of lights as it coars into the sky. The pilots and passengers can make our only hints of the city that bustles below. Hundreds of thousands of men and women live in the sprawling blocks of aparement buildings underneath the flight path of the ascending aircraft. In one fourthstory apartment, three young men open a closer door and remove something which would remind a movie buff of the barooka he had seen in a lite show war movie. They slide the window open and watch the planes-ElAl, Lutchansa, TWA, and Acroflot-each a dearly marked representative of an independent nation. As the marked aircraft arches overhead, they take aim at the looming

The professional naval officer spends a great deal of his time nervously eyeing the ships, hardware, and expertise of his potential enemies. In recent years, this attention has focused, for U.S. naval



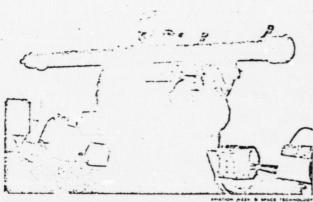
officers, on the rapidly improving Soviet Navy. In our concern for this massive challenge, we must guard against a rendency to forget that the goals of war are political and that these goals may be achieved by forces other than the regular military establishments of the combatants.

In the gray area between peaceful politics and war live numerous organizations capable of contributing to the achievement of national goals. Although this has never been a secret, it is sometimes forgotten that these organizations are improving, their tactics and arms inventories in much the same manner as the world's more conventional military forces do-

A guerilla bond cannot defeat a modern naval torce, but it can inflict an embarrassing loss on an individual component unit, or it can use an atrack on a civilian target to dissinually after the political environment in which the conventional fleet operates. For this reason, it may be interesting to see what sort of improvements have been made in the terrorist aresnal. It would not hopelessly threaten plausibility to discuss the possibility of nuclear weapons or other exortic weaponsy falling into the hands of a terrorist group. Both the spy thrillers and sober military analyses have brought this problem to light. Effective weapons do not have to be exortic, however. The conventional arsenals of the major military powers contain pienty of weapons for the terrorist which do not saddle him with the technical or political burdens inherent in the use of nuclear, chemical, or biological weapons.

One such conventional weapon is the Soviet-built SA-7 Grail surface-to-air missile. The Grail's launcher rube, which is about the sice of a World War II bizzooka, fires a missile which justime out the infrared radiation from aircraft engines. It is considered comparable to the U. Sa-built. Redeve missile which is about four feet fing and which care its aspersonic speeds for a considerable distance in pursuit of a low-flying air-

The simplicity and lightweight ruggedness of this sort of battlefield gended



This man demonstrates just how easy it is to take aim with the \$A-7

weapon (BGW) make it a prime candidate for deployment with the armed forces of the Soviet Union in a variety of applications. It can be lugged by foot soldiers, mounted on vehicles, or carried on board naval combatants. The technology involved is simple enough to lend itself to mass production.

One reason for heavy Soviet investment in the Grail is that it is a combattested system. Use of the Grail against U.S. aircraft in Vietnam was first reported in the spring of 10°2. It downed several aircraft at that time and seriously disrupted reconnaissance and helicopter operations, close air support missions, airborne artillery spotting, and other low altitude aviation operations.

U. S. countermeasures, most notably the use of hot flares to mislead the missile's infrared guidance system, held the casualty rate down but also provided the users of the Grail with a laboratory situation in which to test improvements. The October 1973 Arab-Israeli War offered yet another opportunity to test modifications to the system. As a result, if a Grail operator is linked by today's improved bartlefield communications to one of the many miniaturized radar systems in production, he can be ready for an enemy aircraft before it even comes into view.

The successful record of the Grail has created a demand for the antiaircraft missile in traditionally Soviet-supplied nations and some "neutral" nations. Several countries already have the Grail system, and as the number of countries increases so do the chances that the link will be created in the chain which will lead to terrorist possession of the deadly missile.

From its Soviet origin, the missile might proceed by any number of circuitous routes on its way to a terrorist organization. The missile might begin as part of an arms shipment to a Sovietsupplied nation such as Syria. Syria, like several of its Arab allies, arms and supports the Palestine Liberation Organization (PLO). This "group" includes several factions, each with varying degrees of loyalty to the central command and differing concepts of the most effective means of obtaining Palestinian goals. It is not too difficult to imagine the possibilities by which a radical faction such as the Black September might obtain weapons from more conservative groups in the PLO by gift, there, defection of personnel, or sheer mismanagement.

Another possible pipeline exists in that governments which already support retrorst groups might pass the effective missiles on directly. The Qadhañ regime in Libya, recently the recipient of large quantities of Soviet military hardware, has been suspected as the source of Grail shipments to terrorists on at least two occasions.

In the first case, Italian police apprehended five young Arabs who had rented an apartment in the scaport city of Ostia, near Rome. The apartment was four miles from Leonardo da Vinci Airport and directly underneath the traffic pattern for the North-South runway. Cached in their apartment were two Grail Isunchers and a supply of missiles. The Italian press reported that the terrorists were only hours away from a planned attack on a commercial artificer.

This demonstration of the reality of the Grail threat led to a dramaril, tele-tion by Western European governments when they were informed that Grails had been shipped to terrorists in the Brussels area. Hundreds of troops were required to throw up a special security cordon around airports in Brussels and London. The Grail attack never materialized, but the security measures necessary to protect against it illustrated the type of response required to counter a threat posed by a small group of people equipped with a very small, but effective, weapon.

Different activist groups in nearly every part of the world would probably like to acquire weapons like the Grail whether they planned to employ them or not. Groups in Ireland, Quebec, Black Africa, Asia, and even the United States have resorted, for political reasons, to tactics which emphasize quick. spectacular actions. Spectacular arracks have become recognized as important facers of numerous successful revolutions or "wars of national liberation." The embryonic revolutionary can look to the histories of Israel, Cyprus, Mozambique, Vietnam, and a host of other countries to see places where terrorism helped spawn either a conventional war, or a political victory without large-scale military action.

With the respect generated by their successes, terrorist and guerilla movements are gaining support daily. With money, influential support, and a feeling of growing power, the terrorists and their new weapons could be very much in evidence in the coming months and years.

EDITOR'S NOTE: The views expressed are those of the author and do not necessarily represent the position of the Digartment of Defense or the U.S. Government. UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

THE STATE OF NEW YORK,

Plairtiff,

-against-

AFFIDAVIT

THE NUCLEAR REGULATORY COMMISSION,

: 75 Civ. 2121 (WCC)

et al.,

Defendants.

STATE OF MISSOURI :SS.: COUNTY OF ST. CHARLES)

CAPTAIN JAMES A. ECKOLS, being duly sworn, deposes and says:

- 1. I am a pilot with an American flag commercial air carrier and am Chairman of the Hazardous Materials Committee of the Air Line Pilots Association (ALPA) which represents the professional interests of 32,000 airline pilots on 34 airlines. ALPA is a member of the International Federation of Air Line Pilots Associations which represents pilots from 60 nations. I make this affidavit in support of the State of New York's motion for a preliminary injunction and motion for summary judgment.
- 2. I will, in the ensuing pages, set forth the reasons why airline pilots believe that there exists an imminent and severe danger of catastrophic harm from the continued shipment of special nuclear materials ("SNM") by commercial and transport. My discussion will center on two areas of inadequacy of this method of shipment: I. Safeguards, II. Containment, Control, and Handling.

#### I. Safeguards

of SNM is the severely inadequate security within the air cargo industry. Presently, regardless of cargo, multi-million dollar aircraft and pilots are subject to selection at any time as a "target of opportunity" by skyjackers, extortionists, terrorists or saboteurs. We received a clear lesson as to the very real terrorist threat as 3 Boeing 747's burned to ashes on a patch of Jordanian desert while crew and passengers were held hostage under the muzzles of terrorist sub-machine guns. We have seen as well:

-mid air sabotage
-grenade attacks on land
-attacks on terminals
-abductions
-diversions
-over 370 global acts of terror
endangering 16,000 people.

As I have stated, the lesson is clear, SNM must be removed from commercial air transport.

4. As it stands now, without waivers from the FAA certain materials would be strictly forbidden from carriage aboard any aircraft other than those under the direct jurisdiction of the Department of Defense. Often information as to the presence of SNM is not properly disseminated to crew members actually flying the aircraft and, in some cases, their exposure to danger is shocking, moreover, the related danger to the cargo itself is appalling. The crew members involved in this transportation have not volunteered for this extremely hazardous duty for the benefit of industrial shippers.

- 5. If these materials must be moved by air transportation, they should be moved by military personnel, in military aircraft from military airports that do not constitute a hazard to the public.
- Energy Commission ("AEC") support the contention of the State of New York that the hazards involved with the commerical air transport of SNM, due to such transport's vulnerability to theft, organized crime, terrorism and cargo loss, warrant immediate suspension of such transport of SNM. Sam Edlow, President of Edlow International Company, which company shares a virtual monopoly of the SNM shipping business with the Transnuclear Company, was contracted by the AEC to prepare A Factual Study of Special Nuclear Material Patterns of United States Commercial Organizations and Of Unclassified Exports By The AEC and Its Contractors. ("Edlow Rept."). The report, prepared by that major industry spokesman, contains several specific findings:

-The commercial airline industry is stuck with the fact that enroute terminal use and attendant security risks cannot be avoided.

-Commercial airlines do not find it feasible to disqualify high risk individuals.

-Commercial airlines do not find it feasible to equip vehicles with simple alarms or more sophisticated anti-hijack devices. (In this connection, two well-known national companies providing armed car services were interviewed. Neither company saw "any purpose to be served by equipping armored cars with alarms or other anti-hijack equipment."

-Similarly, commercial airlines do not find it feasible to provide special locks for vehicles.

-Nor do they find it feasible to provide constant communication.

-The airlines do not seal off "driver's" compartments on any vehicles. (Edlow Rept. pp. 24, 25, 42)

- 7. It has been stated by defendants in their affidavits that the reasons for shipment of SNM by air, "as with any material involves factors of economics, reliability, convenience and speed in delivery" (D. Aff. of Leland Rouse, p. 4). This glosses over real reasons for air shipment as determined by Mr. Edlow.

  According to him, cost is the most important consideration to shippers in the selection of shipping method. (Edlow Rept. p. 13)
- 8. The defendants further state that "containers are less likely to be delayed or misrouted when transported by air than by surface transport, particularly when long distances are involved" (D. Aff., Leland Rouse, p. 4). This statement is utterly without basis, and is contrary to the facts of which defendant DOT is fully aware. Sam Edlow authoritatively related the details of several incidents which show such statements by the defendants to be gross distortions of what really goes on in the SNM cargo industry.

"Have you heard about the three famous UF6 shipments of March, 1969? One was mine. 33 kgs. U enriched to 90%, aboard an international flight to New York to Frankfurt, had been loaded on a mixed London-Frankfurt pallet. At London, the pallet was removed from the aircraft, and the London cargo was removed. The balance of the pallet just sat there while the aircraft took off and continued to simply sit at London. We were notified by consignee that the flight arrived without the shipment, and we swung into action. The airline guickly found the cargo, still sitting in London. No airline personnel at London or elsewhere had initiated any action. We had to tell the airline that the cargo was missing. Incompetence -- you can bet your bottom dollar.

"Second famous shipment of March, 1969. Three containers of strategic material, gross weight 850 lbs., left Goodyear on Wednesday, reached Columbus, were taken to Dayton, where they were loaded aboard air freighter for St. Louis for onforwarding to consignee by special truck. Two containers were delivered on Thursday. The third container appeared to be irretrievably lost, but was eventually found nine days later in Boston under a load of shoes. And how was it found — a shoe store was tracing a lost consignment of shoes and Thank God — they found the shoes — with the strategic material underneath. Incompetence — what else?

"Third March shipment. Four containers of strategic material were loaded aboard air freighter at Dayton for St. Louis on Friday. Saturday — two of the four were delivered to consignee. No one with the air line could figure out what happened to the other two containers. Tracing followed, and the missing containers were located on Monday at St. Louis Airport, right where they were supposed to be. Incompetence — nothing else.

"To sum up -- the environment of the transportation industry is one of incompetence, criminality, and unreliability." (Plutonium Diversion, Geesaman, Donald P.; Report before California Legislative's Assembly Science and Technology Council's Energy Panel, June 15, 1972, pp. 15, 16).

9. Incompetence and inefficiency are obviously not the only problems associated with the commercial air cargo industry. William Brobst former Deputy Director of the Office of Hazardous Material, DOT, now with the Energy Research and Development Administration ("ERDA"), in commenting on the then AEC's set of procedures to be followed in protecting special nuclear materials in transportation, stated:

"Although these procedures might be somewhat effective in discouraging the diversion of nuclear material by some bystander who is curious as to the contents of the package, I do not believe that they have any meaningful degree of effectiveness in even discouraging an intentional diversion by any person whose motives are subversive or economic." (Ibid. p. 11).

10. In this regard, Sam Edlow has confirmed Mr.

Brobst's opinion on the effectiveness of safeguards procedures and
"signature service" and has described the condition of the transportation industry into whose hands SNM were being committed.

As he points out, the procedures are only as effective as they
are wanted to be by those in the industry who implement them.

"I was part of an informal meeting some few months ago attended by government personnel, representatives of major truckers, railroads, one airline, insurers, and freight claim agents. It was agreed that the transportation industry is so thoroughly infiltrated by the Cosa Nostra that any cargo which organized crime determines to obtain will be obtained. To put it another way no material is safe during transportation if organized crime decides to lay its hands on the material....

"How very often we read of thefts of bullion, jewelry, watches from secure rooms at air cargo terminals. The hijacking of aircraft is now a weekly occurrence. Today aircraft are hijacked to provide escape means to Cuba. Who here dare say that aircraft willnot by hijacked for the nature of the cargo aboard - because of its high value or its strategic nature?

"Gentlemen, the transportation industry is infiltrated by organized crime and must be adjudged incapable of providing reasonable protection for valuable or strategic cargo. The transportation industry is untrustworthy....

"The high level of incompetency which has been achieved by surface and air carriers staggers the imagination. The inability of the air carrier industry to properly handle the cargo handed to it for air carriage now approaches a national scandal...

"Signature service cannot and will not prevent loss, diversion, or mishandling of cargo. Further, signature service will not give early notice that shipment is lost, unaccounted for, or diverted. At most, it will single out a shipment as being something other than routine. That the regulation provides any more in the way of security, I question." (Ibid, pp. 13, 14, 17).

- ll. It is widely recognized in the industry and among defendants that a nuclear black market, if not already in existence, is bound to develop as SNM is successfully stolen in small or larger quantities. Commissioner Larsen, when still with the former AEC, publically conceded the point. 'Atomic Energy Commission's Symposium on Ssafeguards, Research and Development, October 1969).
- 12. May 1970, the Institute of Nuclear Materials Management published a report on safeguards in transportation. The abstract of that report stated in part:

"the transportation industry is characterized by its own press as...
'rotting at its core'..., law enforcement agencies advise that S1 billion dollars of merchandise is being hijacked or pilfered during transportation each year in the United States, and federal agencies acknowledge that organized crime has a strangle hold on the United States transportation industry. Into this milieu, professional managers of nuclear materials are currently shipping sufficient quantities of nuclear materials to produce nuclear weapons or to direct toward possible nuclear blackmail. The INMM Safeguards Committee explores these issues in this ocument and concludes that the postulated problem is real, current, at the alarm level now, and increasing in scope and risk."

13. Dr. Theodore Taylor, one of the foremost experts in the area of clandestine nuclear weepons use has noted professional criminals can be motivated, simply by the prospects of large profits, to steal fissionable material, for sale to high bidders. "Practically every highly valuable material has been traded in illegal national and international markets. It is hard to see why inadequately protected fissionable materials should be any exception" (December, 1971 AANS Symposium on the Energy Crisis).

with reference to ERDA shipment of SNM, is pointedly addressed by former AEC Director Crowson, Division of Nuclear Materials Security. One of the anachronisms of the NRC policy is that strategic nuclear materials which are to be used for military purposes are shipped under military rules. But, if the same materials are to be used for civilian purposes - although they too could fuel a bomb - they are usually shipped in the words of Crowson "like a special delivery letter" (Science, April 9, 1971, p. 145).

## II. Containment, Control & Handling

- 15. ALPA's independent investigation of the air cargo industry and the present scheme for radioactive materials handling has resulted in a number of findings all of which have been indisputably confirmed by Congressional investigations. Eight of these ALPA findings are as follows:
  - Most hazardous material shipments are carried in violation of federal safety precautions.
  - 2) Shippers, freight forwarders and carriers routinely ignore or misinterpret the law and do not even have a copy of the applicable regulations available where they were needed.
  - 3) The regulations themselves are outmoded, confusing and allow the carriage of materials which do not belong on passenger or cargo aircraft.
  - 4) Inadequate fire-fighting equipment on airlines and the inaccessibility of hazardous cargo make many potential in-flight emergencies impossible to deal with.

- 5) The entire regulatory scheme is threatened by the pervasive issuance of exemptions from the regulations, without any notice to the public or opportunity to protect unsafe operations.
- 6) The overlapping jurisdiction of government agencies dampers effective regulation.
- 7) The redestal Aviation Administration's inspection resignam in the field is virtually non-existent.
- 8) FAA's lexity in enforcement leaves hazardous sectorials regulation violators totally undetended.
- that the FAA, the agency that purports to be the safety regulation agency for the industry, only regulates safety on a spot-check basis between the official business hours of 8:30 a.m. to 5:30 p.m. Yet most of the major air freight activity, for example at John F. Kennedy International Airport, takes place between midnight and 6:00 a.m. The Washington office of ALPA can document numerous instances of inaction by the FAA after specific requests for attention to certain shipments had been made to appropriate FAA personnel.
- establish a Task Force to review the movement of such hazardous materials in air commence. Its report, filed on March 19, 1975 contained a number of significant findings:
  - Based on inspection of carrier facilities and carrier personnel, many of the receiving agents, who in most cases are

-9-

the first persons to physically examine these materials, have received only a minimum amount of training and their acceptance of freight was determined by consulting CAB tariffs or IATA regulations, not the DOT regulations as required by federal law. As a matter of fact, of seven air carrier facilities visited at JFK and Philadelphia airports, only three had copies of the DOT regulations.

- 2. Although notification to the pilot in command has been required for more than 25 years, there is no uniform notification form and many of the notificiation forms checked contained discrepancies which were in violation of the requirements of 14 CFR 103.25.
- 3. The Task Force reported that it examined training programs which varied in duration from 30 minutes to 16 hours. However, many of the longer programs required that the student to do a lot of the work on a home study basis and included that time in the total. The Task Force found that, although the awareness of air carrier personnel has improved, the person receiving the least training time was the agent on the receiving line who, by the very nature of his job function, comes into first contact with the hazardous materials. This same criticism has been noted in every study made on the hazardous materials problem

since the Pan Am crash of 1973. The training requirements have been in effect since December 6, 1973 and all programs must be approved by the FAA; yet this problem has not been rectified.

- 18. The practices, attitudes and performance records of the industry and the federal regulatory agencies only increase the hazards inherent in the commercial air transport of such cargo. As recently as June 19, 1975 Assistant Secretary of the DOT bemoaned at a speech in San Francisco the continued poor compliance record of hazardous materials shippers. General Benjamin O. Davis, Jr. said that DOT had found "...that about 75 percent of all shipments checked on air terminals and elsewhere were in violation...of applicable safety rules."
- 19. As a final note, with regards to the repeated statements by defendants that radioactive materials shipment has o on for 25 years with complete safety, this is another discion of the real facts by NRC and others. As to SNM, there ave been, to my knowledge, no catastrophic releases of plutomium other than the Thule and Palomares spills (See Affidavit of John F. Shea, III, June 16, 1975). However, we have experienced disasters involving the air shipment of other radioactive materials where human error defied all computations as to the probabilities of such events. Attached is a report concerning just one of such instances where radioactive materials, caused a serious emergency involving contamination of hundreds of persons and valuable property in several cities. Specifically the report describes the Delta incident of December 31, 1971 which resulted in the radiation exposure of 917 passengers who had been on board a plane carrying liquid radioactive materials. As the report notes, "an unfortunate chance combination of human errors resulted in this incident" (Exhibit "A", p. 48).

20. The defendants argue a dangerous line. We are to wait for the purportedly "remote" event of an accident or diversion of SNM in commercial air transport rather than preclude the event by removing SNM from such commercial mode now. I personally and professionally believe that to continue to follow such a scheme would be an irresponsible course of action on the part of defendants and, accordingly, support the State of New York's request for injunctive relief and summary judgment.

Capt PAEcholo
CATTAIN JAMES A. ECKOLS

Sworn to before me this

28 day of November, 1975 St. Charles Mo

Chithen Bernel

My Com expirer 7/31/27



# NATIONAL TRANSPORTATION SAFETY BOARD Washington, D. C.

EXHIBIT A

REPORT OF AIRCRAFT RADIOACTIVE CONTAMINATION INCIDENT, DELTA AIR LINES, INC., DECEMBER 31, 1971

## TABLE OF CONTENTS

	$P_{c}$	age
I.	Synopsis	34
II.	Investigation	34.
	A. Background	34
	B. Field Investigation	34
	<ol> <li>Manufacturer/Shipper</li> <li>Carrier</li> <li>Consignee</li> </ol>	34 36 40
	4. Activities After Discovery of Contamination  a. Notification	41 41
	Taken Out of Service	41 42 43 44 44
	5. Examination of the Shipping Containers	45
ш.	Corrective Action	46
IV.	Analysis	47
V.	Findings	48
VI.	Conclusion	49
	ATTACHMENTS	
	<ul> <li>A-1 Photographs of Containers</li> <li>A-2 Package Label &amp; Address Label</li> <li>A-3 Packing Slip - UCC Invoice &amp; Airbill</li> <li>A-4 Copy of DOT Special Permit No 5800</li> <li>A-5 Selected Flight Papers - Flight 981 of December 31, 1971</li> <li>A-6 Notification of RAM to Captain of Flight 925 of December 31, 1971</li> </ul>	

- A-7 Selected Flight Papers Flight 925 of December 31, 1971
- A-8 Convair 880 Cargo Bin Locations
- A-9 Convair 880 Cargo Compartment
- A-10 Deita Air Lines Conveyor
- A-11 Delta Air Lines Baggage Cart
- A-12 Reconstruction of Sequence of Incident Notifications
- A-13 Convair 880 Arrangement of Passenger Cabin
- A-14 Convair 880 Air Distribution System
- A-15 AEC Guidelines for Passenger Scanning

## REPORT OF AIRCRAFT RADIOACTIVE CONTAMINATION INCIDENT DELTA AIR LINES, INC., DECEMBER 31, 1971

#### I. SYNOPSIS

A small quantity of radioactive material leaked from a bulk shipment onboard Delta Air Lines Passenger Flight 9.5 of December 31, 1971, while the shipment was en route from the manufacturer in Tuxedo, New York, to the consignee in Houston, Texas. The aircraft, Convair 880, N8801E, was contaminated and 917 passengers had traveled aboard it before discovery of the leakage and removal of the aircraft from service at Chicago, Illinois, O'Hare International Airport on January 2, 1972. The aircraft was ferried to Atlanta, Georgia, where it was decontaminated under the supervision of the Georgia Department of Public Health and the United States Atomic Energy Commission (AEC). By telephone contacts and press releases, passengers who had flown on this aircraft between the time of aircraft contamination and its removal from service were afforded an opportunity to determine the extent of exposure to themselves and to their baggage.

#### II. INVESTIGATION

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#### A. BACKGROUND

The investigation of this incident was conducted in a sequential manner beginning with the manufacturer's packaging through shipment, discovering of excessive radioactivity, subsequent action, to corrective measures as a result of this incident.

#### B. FIELD INVESTIGATION

#### 1. Manufacturer/Shipper

The Union Carbide Corporation (UCC), Sterling Forest Research Center, Post Office Box 234, Tuxedo, New York, is licensed by the AEC to operate a nuclear reactor in the State of New York. The AEC retains licensing authority over reactor operations. New York is an Agreement State under Section 274 of the Atomic Energy Act of 1954, as amended, and can, therefore, regulate possession and use of nuclear materials within the state.

#### Radioactive Material

UCC advised that the subject shipment was a routine bulk shipment of molybdenum 99 (Mo 99) in 3 normal sodium hydroxide solution, which had a 66.5 hour half-life. This had been a standard Friday afternoon shipment to Bio-Nuclear Laboratories in Houston, Texas, on a weekly basis for the past 12 to 18 months for consignee pickup at the airport.

## Processing

The material was processed in the UCC reactor and moved from there under water (shielding) to hot cell #2 where it was placed into two 500 ml. (or 1 pint) polyethylene screwcap bottles.

## Bottling (Primary Container)

The bottles were approximately 7 inches high and 3 inches in diameter with a 7/8-inch inner diameter and 1 3/8-inch outer diameter neck. The bottling operation in the hot cell was performed behind a 4-foot-thick window, using a pair of mechanical manipulators each of which has two wide opposing metal fingers. The manipulators exert a force similar to that applied by the operator as they provide no mechanical advantage.

To cap the bottles, the neck of a bottle was held by one manipulator while the screwcap was closed down as tightly as possible, "finger tight," with the other manipulator. The plastic cap was 1 3/8 inches high and 1 5/8 inches in diameter.

## Packaging (Secondary Container)

The bottles were placed on . conveyor cart and transported to the conveyor station at the back of the hot cell complex, where each bottle was placed, with the aid of a single manipulator, into a secondary, shielding container. This was a stainless steel/lead lined container called a "pig." The outer dimensions of the pig were 12 inches high and 8 1/2 inches in diameter. The inside space was 3 1/4 inches in diameter with a 1 7/8-inch deep inner ledge at the top. The pig had been decontaminated thoroughly and was placed in the receiving station, which was just below the conveyor station, before the bottles were moved from hot cell #2.

A shielding plug top with a neoprene type gasket was then put in place and the pig was lowered onto a dolly. The heavy shield door was opened and the shipment was wheeled out of the conveyor station to the packaging area. The plug top was bolted down onto the pig with four ½-inch bolts. Smears (paper swipes) were taken to verify that there was no contamination on the outside of the pig.

## Outside Wooden Protective Jacket

The pig was then lowered into a wooden overcoat or jacket, the top of which was bolted down onto six 1/2-inch steel bolts. The outer jacket was a 4-inch-thick layered plywood container, the dimensions of which were 23 inches high by 23 inches in diameter. It was secured to a 5-inch-high, 28-inch square pallet to facilitate handling by forklift. Readings were then taken of the radioactivity on the surface (200 mR/hr) and at 1 meter distance (8 mR/hr). The packages were labeled, sealed with a lead seal, and moved onto the loading dock where they were smeared once more before being loaded by crane onto a company truck for forwarding. An illustration of the containers appears in Attachment A-1.

UCC had no written procedures for the maintenance of reuseable Type B pigs and wooden jackets. When these containers were returned by motor freight, they were checked for any

contamination, decontaminated if necessary, and examined by personnel from the packaging area to assure that these containers appeared to be in satisfactory condition for reuse.

#### Contents

Each of the two polyethylene bottles in this shipment contained 283.5 ml. of Mo 99 in liquid form and the calibrated isotope specification for each was 65,200 mCi (millicuries). When packaged for shipment, each completed piece weighed 430 pounds and had a Transport Index (TI) of 8. The total shipment was two pieces at 860 pounds with a TI of 16.

The labeling of the packages was as follows:

a. Metal tag secured to outside of jacket (reproduced below)

## RADIOACTIVE MATERIAL

U.S.A. D.O.T. S.P. 5800

Type -B

Wt. 90 kg

UNION CARBIDE CORPORATION TUXEDO, NEW YORK

b. Two Radioactive Yellow-III labels on opposite sides of each jacket, (see Attachment A-2a).

c. One address label glued to jacket, (see Attachment A-2b).

d. "Packing" slip envelope (white with red print) glued and taped to jacket (containing UCC Order - Invoice 28856 and a copy Airbill Number 006 JFK 432 4103, prepared by the shipper) (see Attachment A-3).

e. Manila envelope taped to jacket, rubber stamped in red, "Department of Transportation

Special Permit No. 5800," containing copy of the permit, (see Attachment A-4).

#### Transport

At 2:10 p.m., Friday, December 31, UCC delivered the subject shipment to the Delta Air Lines air freight dock at John F. Kennedy International Airport, Jamaica, New York (JFK) in their own Chevrolet Carryall, a 3/4-ton truck.

Other UCC shipments were also delivered to Delta Air Lines in the same movement. These shipments included 4 cartons of radioactive material weighing 515 pounds which were consigned to Hastings Radiochemical Works in Houston on Airbill 006 JFK 4327 4114. One piece was a pig slightly smaller than, but similar to, that consigned to Bio-Nuclear Laboratories.

The larger radioactive shipments were moved by forklift from the truck and placed onto an

airline cargo cart with dropsides.

## 2. Carrier

Delta Air Lines, Inc., Atlanta Airport, Atlanta, Georgia, 30320, is a Delaware corporation with headquarters offices in Atlanta, Georgia. The company operate as a scheduled air carrier under a

currently effective certificate of public convenience and necessity issued by the Civil Aerona acs Board, and an operating certificate issued by the Federal Aviation Administration (FAA).

Delta personnel received the Bio-Nuclear shipment at their air freight terminal at JFK and signed for it in good order with no exceptions noted.

#### Receipt

The shipment was received on the Delta ramp and moved from the delivery truck onto a Delta Wollard Baggage Cart, Model BC-450, where it remained until it was taken out to the flight line for loading into the aircraft. It was not taken into the warehouse.

## Load Planning

The load agent, in working the load, found he had more than 50 TI's, which is the maximum allowable on one aircraft. Therefore, he held one shipment of radioactive material destined to Houston until Delta's next departure, passenger-carrying Flight 981 of December 31, which was scheduled to depart only 2% hours after Flight 925. This shipment was shown on airbill JFK 4327 4136. It weighed 33 pounds and had a TI of 8. Flight 981 loadpapers are Attachment A-5.

## Dispatch

Flight 925 was dispatched with a total TI of 48, consisting of two shipments to Houston in Cargo Bin 3:

No. of Pieces	Weight (lbs.)	Airbill No.	Transport Index
2	575	JFK 4327-4114	17
2	860	JFK 4327-4103	16*
		*to Bio-Nuclear	
and one shipment	to New Orleans in C	argo Bin 4:	
6	228	JFK 4377-3811	15

The captain was so advised by the Restricted Articles Notice form attached to his clearance release (see Attachment A-6). Other freight, air mail, and first class mail were also loaded in bin 3 (see Flight 925 dispatch records which are Attachment A-7).

#### Cargo Bins

The Convair 880 has two cargo bin areas below the passenger compartment floor, one forward of the wing and the other behind the main landing gear and hydraulic compartments, (see Attachment A-8). They are each 19 feet long by 3 1/2 feet high and each has one 38-inch-wide access door in the middle of the bin on the right side of the aircraft. However, the push-in door, cargo net, and fuselage limit the height of the entrance to 20 inches (see Attachment A-9). For convenience, Delta numbers their cargo bins #1 through #4. The forward section of the forward

bin is #1; the aft section of the forward bin #2; #3 is the forward section of the aft bin; and the aft section of the aft bin is #4.

## Passenger Load

On departures from New York and New Orleans, the aircraft was occupied as shown in the following chart:

Crew: 3 Flightcrew (cockpit)
3 Stewardesses (cabins)

From New York	1st Class (Forward Cabin)	Coach (Aft Cabin)
No. of seats evailable	24	96
Passengers to New Orleans	1	30
Houston	0 + 1 (Nonrevenue)	19 + 1 (Nonrevenue)
Total	2	50
From New Orleans to Houston	0 + 2 (Nonrevenue)	22 + 1 (Nonrevenue)
Total	2	23

## Cargo Loading

The Ramp Agent and two Ramp Service Agents who loaded the three heavy Bio-Nuclear and Hastings radioactive pieces of freight reported that the loading procedures for bin 3 were as follows:

The International Scout Conveyor - Model TC-476 was placed at the cargo bin door (see Attachment A-10). The sides of the baggage cart (in this case freight cart #12) were dropped to make it more nearly a flat bed and it was maneuvered to a position directly under the low end of the conveyor belt (see Attachment A-11). From there the first 430-pound piece was tipped on its side and lifted by two men until it started up the belt, at which time it was rolled over onto its flat top because the pallet on which it was secured extended 2 1/2 inches beyond the wooden jacket and hampered the operation by digging also the belt. It was balanced by one man as it progressed up the belt to the cargo bin door. The conveyor height was adjusted lower so that the pig could then be rolled over onto its side and worked into the cargo bin from

where it was pushed all the way forward in the bin. There was no apparent damage done to the shipments during loading, and handling was held to a minimum because of the weight. After the heavy pieces were placed, the following Houston cargo was loaded into bin 3:

No. of Pieces	Weight (lbs.)	Class
12	214	Air Mail bags
5	132	First Class Mail
9	207	Air Freight

## Intermediate Stop

The compartment was opened in New Orleans; however, there was no freight or mail to be off-loaded from the forward section, bin 3, so New Orleans personnel were not involved with any of the contamination.

## Radioactive Material Training

The Delta Air Lines training supervisor at JFK was not interviewed personally because he was out of town on a business trip, but he prepared a statement which reads as follows:

"My training schedule at JFK follows prescribed company schedules and material. All new employees with Delta who have contact with radioactive materials are given training in their first week of employment. In addition all employees are given recurrent training once each year on radioactive materials.

"Our source of material for training are:

1. Hazards of Radiation in Shipping Radioactive Cargo, (Book).

2. Radioactive Materials (Standard Practice 805).

3. Air Cargo Restricted Articles (Standard Practice 891).

"Included in this training our employees are shown the shipping labels used, the total amount of Transport Index allowed on our aircraft, and the bins we allow radioactive materials in.

"Also I instruct employees in handling, distances, and dangers should package become damaged.

"Our Load Agents, Ramp Agents and Supervisors are instructed on the above, however, they receive additional training such as notification of Pilots of all restricted articles onboard, proper entries on our load message (teletype), and those agencies to notify in case of a damaged shipment."

## Cargo Off-Loading

At Houston, the four Ramp Service Agents who off-loaded the Houston cargo reported that luggage from bins 1 and 2 was off-loaded first, then the freight cargo from bins 3 and 4. They reported that the three heavy containers of radioactive materials in bin 3 were lying on their sides and were not standing in upright positions. "Nothing unusual was thought of this as they have to be turned sideways, tilted, etc., to get them in and out of Convair 880 plane cargo bin doors. There also was moisture noted on bin floor, but this is not uncommon as many times a plane is

loaded in the rain or bad weather and moisture is carried into a bin area on cargo." The two men at the foot of the conveyor belt slid the containers off the conto a cart. "Since these articles are very heavy, 430 lbs. each, we had to slide them on the collaboration of the collaboration of the cart, set them upright, and positioned them on the cart.

## Warehouse Storage

The three heavy containers of radioactive material and several small boxes containing radioactive material were then taken to the freight warehouse where they were left on the cart overnight, separated from any other airfreight. A shift change followed this activity, but the next morning, January 1, the Bio-Nuclear shipment was unloaded from the cart in the warehouse by the same man who later helped load it on the consignee's pickup truck the following morning, January 2.

#### Aftermath

The handler who worked inside cargo bin 3 during the off-loading at Houston was contacted at 4:30 p.m. on Sunday, January 2, and advised of the contamination problem. His work clothing was found to be contaminated, and he was given a medical examination which revealed no apparent injury. He subsequently reported a burn area on one leg which had been exposed to the contamination. An examination of this condition revealed that it was "...a chemical reaction from the solution the radioactive material was in."

## 3. Consignee

Bio-Nuclear, Inc., 6006 Schroeder Road, Houston, Texas, 77021, is a subsidary corporation of the American Biomedical Corporation, Dallas, Texas. It is a Texas State licensed radioactive materials processor. At the time of the incident, Bio-Nuclear did not have a Health Physicist on its staff.

They have been receiving from UCC weekly bulk shipments of liquid Mo 99 for over a year and use it to process Technetium (Tc 99), a daughter of Mo 99 with a 6-hour half-life. Tc 99 is a radioisotope used by the medical profession for diagnostic purposes. Routinely, the shipment is sent on Fridays. The consignee's plant is closed on Saturdays. The shipment is picked up early on Sundays, for Sunday night processing and early Monday distribution to customer hospitals and doctors.

About 7 a.m. Sunday, January 2, the Bio-Nuclear shipment was picked up by their driver from the Delta freight dock at Houston Intercontinental Airport. Hastings Radiochemical had previously discovered that its consignment was contaminated, and that company notified Bio-Nuclear of the possibility that the Bio-Nuclear consignment was also contaminated. The Bio-Nuclear packages were surveyed with a Ludlum Geiger counter (2000 mR range), and the reading was off the top of the scale. Traces of white powder also were found on the rim of the pig. The liquid remaining in the two plastic bottles was transferred to the extractors as quickly as possible to minimize radiation exposure. No measurements were made of the amounts actually in the bottles, but it was noted that the liquid level in one bottle was lower than those of previous shipments, and the inside of the pig was wet. The packaging containers and absorbent papers used for handling were removed to a remotely located warehouse.

Bio-Nuclear called Delta Air Lines, informed them of the findings, advised them to check the employees who handled the shipment, and gave interim instructions on decontamination procedures. After moving the contaminated containers to the warehouse, Bio-Nuclear notified the Texas State Health Department.

# 4. Activities After Discovery of Contamination

#### a. Notification

There are specific requirements for the carrier to make immediate notification to the nearest FAA facility by telephone in certain cases of dangerous article incidents. Breakage of a shipment calls for immediate notification to the shipper and the Department of Transportation (DOT) and a report within 15 days to the DOT, Hazardous Materials Regulations Board. It is required that a copy also be sent to the FAA facility which was first contacted (14 CFR Part 103.23, Part 103.28 and 48 CFR Part 171.16).

Since the shipment appeared to be in good condition at the time of consignee pickup, and the carrier was not immediately alerted to the possibility of contamination, it was several hours before all concerned parties were notified of this incident. Official records of the first few original notifications are either nonexistent or very sparse. Consequently, the attached notification chart (Attachment A-12) is a reconstruction of the approximate sequence of events since almost all times shown are estimates.

#### b. Postincident Activity

# (1) Aircraft Movement Until Taken Out of Service

Delta Air Lines did not know that their plane, Convair 880, N8801E, was contaminated when it arrived in Houston before midnight on December 31, 1971. Consequently, the aircraft was continued in regularly scheduled passenger service until a landed at O'Hare International Airport, Chicago, Illinois, about 8 p.m., January 2. Following is a chart which show the flight numbers and cities involved during this period of operation while the aircraft was contaminated.

Flight/Date	Origination	Intermediate Stops	Termination
#925 Dec. 31, '71	New York, N.Y.	New Orleans, La.	Houston, Texas
#998 Jan. 1, '72	Houston, Tex.	Atlanta, Ga. Dayton, Ohio Columbus, Ohio	Miami, Fla.
#952 Jan. 1, '72	Miami, Fla.	West Palm Beach	Chicago, Ill.
#939 Jan. 1, '72	Chicago, Ill.	Louisville, Ky. Atlanta, Ga.	Tampa, Fla.

Flight/Date	Origination	Intermediate Stops	Termination
#992 Jan. 1, '72	Tampa, Fla		Atlanta, Ga.
#1951 Jan. 2, '72	Atlanta, Ga.		Miami, Fla.
#1942 Jan. 2, '72	Miami, Fla.		Atlanta, Ga.
#955 Jan. 2, '72	Atlanta, Ga.		West Palm Beach, Fla
#954 Jan. 2, '72	West Palm Beach, Fla.	Tampa, Fla.	Chicago, Ill.

The aircraft arrived in Chicago, Ill., at 6:30 p.m., was surveyed, and taken out of service.

Ferry Jan. 2 Chicago, Ill.

Atlanta, Ga.

# (2) Aircraft Contamination

The aircraft was initially surveyed by the AEC at Chicago, O'Hare International Airport after 7:00 p.m. on Sunday Jan. 2.

Instrument:

Juno Model #7 survey meter

Readings:

- at rear cargo door 50 mR/hr.
- In center of cargo bin 3 500 mR/hr. to 3R/hr.
- In aft passenger cabin at seats 34 & 35 200 mR/hr.

The scheduled flight was sencelled and the aircraft was moved to the hangar area until it could be ferried to Atlanta

On arrival of the ferry flight at Atlanta, the Georgia Department of Public Health, and the AEC, assisting in the emergency, again surveyed the aircraft.

Instrument:

Eberline E-500 GM type (Geiger-Muehler scanner) with 30 mg/cm<sup>2</sup> probe.

Readings:

Contact reading on floor under seat 34-140 mR/hr.

• Highest reading on bottom of seat 35-60 to 70 mR/hr.

Instrument: Readings: Eberline E-120 (maximum range of 50 mR/hr).
Forward end of cargo bin (without handprobe) - 3 to 4 R/hr.

(estimate based on state of reading).
Smear at forward end of cargo bin - 2R/hr.

• Smears-on spots generally in middle of cargo bin - 4 mR/hr. to 10 mR/hr. (contaminant could be wiped out).

• Air inlets (at side of cabin just below hatracks) above seats 34 & 35 - low level traces of smearable contaminant.

Air exit vents (outboard of and below the seats) at seats 34 and 35
 little more than a trace (see Attachment A-13 for seat locations).

Seat and floor readings were the result of direct radiation from the leaked radioactive liquid source. Smearable contamination resulted from airborne radioactive particulate (e.g., dust).

There was no contamination found at the adjustable ventilators installed over the individual passenger seats. (See Attachment A-14 for details of Convair 880, Air

Distribution System.)

The only access route for air movement between the cargo compartment and the aircraft ventilating system was a 2 3/4-inch breather hole provided in the sidewall above the cargo door to permit pressure equalization between the passenger compartment and the cargo area. On depressurization, air from the cargo compartment exhausts into the outflow side of the system to the outflow valve. Air in the cargo compartment is generally static except during cabin pressure changes. (See Attachment A-9 for location of breather hole.)

#### (3) Aircraft Decontamination

The Georgia Department of Public Health, Radiological Health Service in Atlanta, took charge of and actually decontaminated the aircraft and was assisted by Delta Air Lines personnel. The AEC Regional Compliance Office in Atlanta, although primarily a regulatory organization, served as coordinating office. They worked with DOT, FAA, and the carrier. AEC Operations Division personnel furnished Radiological Assistance Team support where necessary.

After determining that the cargo bin was constructed with a fiberglass liner taped to the structure and a metal floor, it was decided to remove the liner from bin 3 and strip out the

old tape.

Personnel who were to enter the cargo bin were dressed in full length cover-alls, rubber boots, rubber gloves and were equipped with a Martindale respirator, two dosimeters (instruments for measuring doses of radioactivity) and a film badge. The first man into the bin was allowed a maximum exposure time of 15 minutes. His dosimeters read 38 mR. Consequently, the next man in was allowed 45 minutes to work and his exposure was 100 mR. The man in charge of the operation who was in the midst of the activity the entire time had a 100 mR reading on his self-dosimeter.

The fiberglass floor liner, when removed, showed 2-plus R/hr., as did two panels of the metal underfloor and cargo tiedown rings, which were also removed. Air tools were used and insulating material was vacuumed out. The inside was then scrubbed with liquid soap and rinsed, but was not flushed, to avoid possible spreading of the contaminant. On Monday, January 3, 1972, at 3:30 p.m., the aircraft was released. When surveyed, the readings on the aircraft structure (excluding the cargo bin liner, which was removed) had ranged from 160 mR/hr. to 2-plus R/hr. On completion of the decontamination, the maximum contact reading was only 50 mR/hr. under the aircraft belly.

On January 6, one week after the incident and more than 3 days after decontamination, the aircraft made its first landing in Tampa, Florida, where it was checked for radioactivity and was found to be contaminated. Accordingly, the aircraft was sent back to Atlanta for further checking and decontamination, as necessary. There were two spots in the cargo bin

where contact readings could be found. The tape was stripped out and no removable contamination was present. The aircraft was again returned to service.

This incident provided an example of the differences in response to tests for radioactive contamination resulting from different scanning equipment utilized, proximity to the source, and the interpretation given to the various readings.

# (4) Employee and Passenger Involvement

The first consignee (Hastings Radiochemical) to receive a shipment from the subject flight, discovered the contamination by normal scanning. They checked the employees and equipment before the contamination had time to spread in their facility. By the time Bio-Nuclear was notified the following day of the possibility of contamination, their driver had picked up the shipment at the airport. However, on receipt of the shipment at the plant, they handled it as a "hot" shipment. Consequently, there was no contamination spread throughout that facility.

The first word of this incident received by the manufacturer was followed by a check of their facilities which revealed no contamination on their equipment or employees.

By the time the carrier was notified, the contaminated aircraft had been through airports in 10 cities; many employees had serviced it with numerous pieces of airline equipment; and much freight, express, and mail had been moved in its cargo compartments. Most of these could be traced, but the mail was the exception. However, the major problem confronting the airline was the 917 passengers who had flown onboard the aircraft and had their baggage in one of the cargo compartments.

The AEC established scanning stations in the sarious cities involved and established a set of guidelines for Delta to implement (see Atrachment A-15). Meanwhile, Delta personnel started with the ticket flight envelopes and acceptable backtracing the people who were shown to have been onboard the aircraft. More than two-thirds of the total number were contacted personally by telephone, and the press was used in certain off-route areas to advise passengers of the problem and offer professional assistance to scan them and/or their baggage.

Survey check stations were set up in the ten cities at which the contaminated aircraft had stopped. The personnel from these check stations also surveyed eight homes on request. Passengers were advised by phone and the news media that they could either come to the check stations or contact their state health agencies. Arrangements were made for the employees who had actually worked the shipment to have total body scans performed at other places, such as local lospitals or medical schools which had the facilities to perform this task.

The results of the passenger survey indicated that neither passengers nor employees had been subjected to a personal health hazard although some had been exposed to more radioactivity then is acceptable under the concept of the lowest practical exposure of people to radiation. This information was also reported in the press.

# (5) Baggage Involvement

One hundred twenty-four passengers brought 271 various articles plus two dogs to the survey check stations for examination. Numerous bags were found with a small amount of contamination, and there were some with comparatively high levels of contamination.

Contamination on a piece of luggage old not mean that the entire piece was radioactive, but that there was a spot on it which y ided a high reading. In most cases, on the smoother finish luggage, this was easily washed off, and the luggage was turned back to the owner immediately. Some of the cloth finish bags did not clean up so readily and were either stored by the airline until the radioactivity decayed or were covered with tape and returned to the owner for personal storage in some remote area of his home until such date as the radioactive would have decayed.

No total has been recorded yet for the numbers of articles that were surveyed by the other health agencies. However, if there had been any gross radioactive findings, they would

have been reported to the AEC or State authorities.

There were some instances of contamination found on baggage-handling facilities at airports served by the aircraft. Those facilities were decontaminated as soon as they were discovered.

# 5. Examination of the Shipping Containers

Twenty-five days after the radioactive leak occurred, the shipping containers were viewed in a remote quarantined warehouse belonging to the consignee. The items were not handled because they were still too radioactive. The following notes were made.

Subject of observation	Unit identified as #40	Unit identified 2s #16
Top section of wooden protective jacket	Both sides of top, in line with forklift access on pallet, plywood rings were chafed and abraded.	Both sides of top in line with fork- lift access on pallet, plywood rings were chafed and abraded
Sodium hydroxide (NaOH) deposits.	Visible salt de- posits in chafed area on only one side of wooden overcoat top.	Visible salt deposits at outside of juncture between top & bottom of wooden overcoat.
Gasket between lead- lined plug top and pig (secondary con- tainer).	Section approx. 3 in. along outer diameter, roughly 70° - 80°, was missing.	No gasket present.

Subject of observation	Unit identified as #40	Unit identified as #16
Polyethylene bottle (primary container).	Reportedly, water had replaced radioactive liquid to the top of bottle and top had been secured finger tight: Bottle resting down in beaker with some liquid in the bottle was squeezed between fingers, liquid escaped.	

Thirty-eight days after the shipping incident, the containers were viewed again after they had been returned to UCC. They were in the plant, but isolated in a roped-off quarantine area. The container parts were still too radioactive to be handled.

During this visit to the plant, a demonstration of the polyethylene bottle filling process was conducted by the hot cell operator who had filled the bottle for the subject shipment. For this demonstration, however, water was used instead of a radioactive material. The process followed that which was described earlier in this report. After the demonstration bottle was removed from the hot cell and checked for any contamination, it was picked up with gloves, and when tipped upside down, the water leaked rather freely. Then the "tightness" of the screw-cap was checked. Although it had appeared to be on securely, it was only "manipulator-finger" tight. It released and unscrewed with only very light fingertip pressure. Subsequently, the top was tightened with fingers and the thumb around the cap and the seal then contained the liquid inside.

#### III. CORRECTIVE ACTION

Subsequent to the incident, there was a concerted effort toward eliminating the potential for another incident involving a radioactive material leak which could contaminate cargo and baggage areas in aircraft and/or endanger passengers or the public at large.

The manufacturer, UCC, took several actions that included:

Meeting with the Atomic Industrial Forum, which is an industrial trade association comprised
of radioisotopes manufacturers, shippers, processors, etc. The Radioisotope Committee agreed
to develop new, effective, and workable container leak-tests that could be adopted by the
American Standards Association.

· Discontinued use of the old polyethylene filler bottle for a new one with a different sealing

acrangement.

Evaluation of an induction-welded scaling cap for the primary container.

Primary container for liquid shipments are now leak checked to 25 inches of mercury before they leave the hot cell.

· Changed from handmade neoprene gasket for the pig to manufactured natural gum rubber

gasket for better seal.

 Consideration of a change to a plug type gasket that would fill the remaining space around the top of the polyethylene bottle.

Pigs with gaskets to be leak checked once and then rechecked again each time a gasket is

changed.

 Consideration of a leak-check for the bottle and secondary container pig for each liquid, Type B and Iodine shipment.

 Initiating a preventive maintenance program with records kept, using newly assigned serial numbers to pigs.

Instituted an administrative change which requires two people (packer and man who worked

hot cell) to check the packaging of each shipment.

The carrier proposed to the Civil Aeronautics Board that shippers of radioactive material in Type B packages be required to conduct a leak-test at the point of origin; and state in writing that the consignee will perform a wipe-test within 3 hours of shipment arrival at destination. This will assure that packages are safe to carry on aircraft and determine if leakage has occurred during flight. This tariff became effective March 12, 1972 and is to expire June 12, 1972. CAB Order No. 72-3-28 dismissed the complaint against it.

#### IV. ANALYSIS

Of primary concern in this analysis are the conditions leading to the leakage of a bulk radioactive shipment in liquid form which contaminated equipment and exposed the public to higher levels of radiation than the generally acceptable minimum. Reports of all the authorities concerned with this incident assured those people who were involved that the exposures encountered did not constitute a health hazard. It did, however, create many harrowing hours of activity and concern for the passengers on the flights; for employees who handled the contaminated package and subsequently used the contaminated equipment; and for the personnel responsible for decontaminating of equipment and scanning people and baggage for radioactivity.

There is no shortage of regulations governing the manufacture, transportation, and use of radioactive materials. Admittedly, the regulations are rather complex and spread throughout several different volumes, but they are specific in the requirement that the radioactive material must be

contained.

The manufacturer was thoroughly familiar with the product, how to handle it safely, and the Type B packaging being used, because this had been, for more than a year, a routine weekly bulk radioactive

shipment to the same consignee.

The manufacturer's employees reportedly had operated a nuclear reactor and packaged the product for shipment over the year without injury or incident. The redundant (primary and secondary container) Special Permit authorized packaging was designed to survive major accidents in transportation without releasing the contents. These requirements covered impact, as well as

subsequent fire.

Possibly the aforementioned familiarity with the reusable Type B containers led to a relaxed approach in the maintenance of the stainless steel/lead-lined pigs. There was no written company procedure for assuring that each pig met the standards for reuse. The plastic inner bottles had apparently served well, and there seemed to be no reason to especially mistrust them or their security. Even for the demonstration-filling of a typical plastic bottle, the liquid (water) was not contained by the screw cap as it was installed by the operator/manipulator combination. However, it was noted that the top could easily be screwed down tightly enough with bare hands to have satisfactorily contained the liquid. Apparently, the final inner bottle seal had not been tested recently.

"This Side Up" labels were not required on the outside of the packages. If the containers are satisfactory, there should be no need for this addition. However, the outside wooden protective jacket is shaped with a pallet/platform bottom which would tend to indicate which way it should be carried

if for no other reason than to spread the load over a larger section of the cargo bin floor.

The bulk of the individual 430-pound package necessitated normal upright handling by forklift and crane. However, it did create problems when it came to loading the 28-inch-high package into a 20-inch-high access door of a CV-880 cargo bin. There was room, once inside, for the package to have been turned upright onto its pallet base. If this had been done, the bottle would have had only about 10 minutes to leak rather than approximately 4 hours. Accordingly, the radioactive liquid probably would not have leaked outside the secondary container. This would also have prevented subjecting the bottle to air pressure changes while it was upside down.

The carrier indicated that it had a training program wherein the employees were instructed in handling radioactive shipments. The AEC in Atlanta reported that they had given instruction on this subject to the carrier's management personnel for relaying to the cargo handler (Ramp Service Agent) level. Some of the Ramp Service Agents interviewed had received such instructions, but others of the

cargo handling personnel indicated that the instruction had not been given to them.

Although it was preplanned, the delay by the consignee in picking up the shipment added to the magnitude of the problem, as did the loose notification procedures and the lack of a specific emergency procedures plan. These aspects delayed a timely discovery and immediate initiation of

remedial measures.

Subsequent to the original interview of the Georgia Department of Public Health personnel, the Radiological Health Service representative, who was in charge of the aircraft decontamination in Atlanta, was contacted for some additional information and for clarification of some reports. During discussion of the "traces" of contamination reportedly found in the passenger cabin air inlets and air exit vents, it was determined that air vent contamination was not a problem since the trace readings were insignificant, and the origin of the contaminant was questionable. It was explained that the smears/wipes of the upper and lower grids of the ventilating system were made and placed in envelopes, then into a bag. Following this activity, the smear/wipes were made in the highly contaminated cargo compartment. These were then placed in envelopes and all envelopes were taken to the laboratory.

At the laboratory, the contents of the 20 to 30 envelopes, some of which were "extremely hot," were then placed inside glassine envelopes. The multichannel analyzer with a 5-inch sodium iodide crystal indicated only traces, approximately 300 counts/min. or less. This is considered to be an insignificant amount, and it is suspected that this trace amount was the result of cross-contamination of the specimens, especially since the entire air flow is into the cabin through the inlet, out of the

cabin by the exit vent, past the cargo bin breather, to the outflow valve.

#### V. FINDINGS

•. The reusable Type 2 packaging used for transporting the subject radioactive bulk shipment in liquid form did not fulfill the containment requirements of the regulations.

• The manufacturer did not have a standard maintenance procedure for overseeing the condition

of the returned Type B pigs before reuse.

• An unfortunate chance-combination of human errors resulted in this incident, i.e., plastic bottle top too loose, pig gasket in unsatisfactory condition, package rolled onto and left on its side during transport. The removal of any one of these steps from the sequence would have prevented this incident.

• The carrier's training program for handling radioactive materials had not reached all cargo handling personnel.

• A routine delay in pickup of the shipment by the consignee and the lack of a specific emergency plan for incidents such as this prevented timely discovery of the situation and initiation of immediate remedial action. This resulted in increasing the magnitude of the problem.

• Trace indications of radioactive contamination in the passenger cabin ventilating system were the result of cross-contamination of the specimens as they were taken to the laboratory.

· Reportedly, there was no health hazard to passengers or employees involved in this incident.

#### VI. CONCLUSION

It is concluded that this incident occurred because of the improper packaging of a bulk liquid radioactive shipment in a poorly maintained reusable Type B container. A contributing factor was the transport by air with the package lying on its side.



Typical PRIMARY CONTAINER
Polyethylene bottle

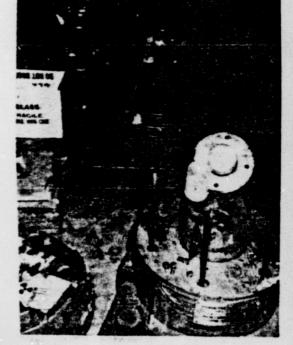
SECONDARY CONTAINER "PIG"
Stainless steel/lead lined
Bio-Nuclear package # 40



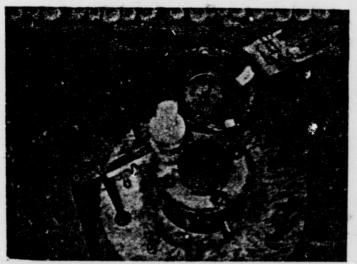
# ATTACHMENT A-1-2



Typical - DOT SP-5800 SHIPPING CONTAINER Wooden protective jacket



CONTAINER #16 - Bio-Nuclear Neoprene gasket missing



CONTAINER #40 - Bio-Nuclear Section of neophrene gasket missing

ATTACHMENT A - 2



Package Label
RADIOACTIVE - YELLOW III

Bright yellow upper half White lower half



b.

FROM

# UNION CARBIDE CORPORATION

STERLING FOREST RESEARCH CENTER P. O. BOX 324, TUXEDO, NEW YORK 10987

To:

4 %

BIO-NUCLEAR LABORATORIES

HOLD AT AIRPORT

HOUSTON, TEXAS

Address Label

CONTENTS - MERCHANDISE

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# ATTACHMENT A - 3

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\$10.00 PER WEEK WILL BE
MADE FOR CONTAINERS
HELD MORE THAN 7 DAYS.



UNION CARBIDE CORPORATION STERLING FOREST RESEARCH CENTER P. O. BOX 324, TUXEDO, N. Y. 10987

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# DEPARTMENT OF TRANSPORTATION HAZARDOUS MATERIALS REGULATIONS BOARD WASHINGTON, D.C. 20590

#### SPECIAL PERMIT NO. 5800

This special copy permit is issued pursuant to 46 CFR 146.05-4 of the U.S. Coast Guard (USCG) Dangerous Cargo Regulations and 49 CFR 170.13 of the Department of Transportation (DOT) Hazardous Materials Regulations, as amended.

- 1. The U. S. ATOMIC ENERGY COMMISSION (USAEC) and its contractors and licensees, the DEPARTMENT OF DEFENSE and its contractors, and licensees of "agreement states" as approved by the USAEC, are hereby authorized to ship Type B quantities of any non-fissile radioactive material in either normal or special form, as provided for herein.
- 2. Each user of this permit must register his identity with this Board prior to his first shipment under the permit.
- 3. The authorized packaging consists of an interim DOT Specification 20WC wooden protective jacket, as described in Appendix A hereto, when used with any single one of the following types of inner containment vessels which must fit snugly within the jacket:
  - a. A DOT SPECIFICATION 55 (or equivalent) metal-encased shielded inner containment vessel;
  - b. A DOT Specification 2R (or equivalent) metal inner containment vessel; or
  - c. A DOT Specification 7A inner packaging which has a metal outer wall (not authorized for normal form radioactive materials).
- 4. The packaging design is based upon the ambient conditions as prescribed in Marginal C-2.4.3 of the Regulations for the Safe Transport of Radioactive Materials, 1967 Edition, International Atomic Energy Regulation (IAEA).
- 5. The authorized package meets the criteria of the International Atomic Energy Agency for Type B packaging for radioactive materials.
- 6. Prior to each shipment authorized by this permit, the shipper shall notify the consignee and, for export shipments, the competent authority of any country into or through which the package will pass, of the dates of shipment and expected arrival. The shipper shall notify each consignee of any special loading/unloading instructions prior to his first shipment.
- 7. The outside of each package must be plainly and durably marked "USA DOT SP 5800" and "TYPE B", in connection with and in addition to the other markings and labels prescribed by the DOT regulations. Each shipping paper issued in connection with shipments made under this permit must bear the notation "DOT SPECIAL PERMIT NO. 5800", in connection with the commodity description thereon.

#### Continuation of SP 5800

- 8. Each package of gross weight in excess of 50 kilograms (110 pounds) must have its gross weight in kilograms plainly and durably marked on the outside of the package.
- 9. Shipments are authorized only by vessel, cargo-only aircraft, passenger-carrying aircraft, rail, and motor vehicle.
- 10. No special operational transport controls are necessary during carriage except as specified herein, and no special arrangements have been made under Marginal C-6.5 of the IAEA Regulations.
- 11. For shipments by water, the shipper or agent shall notify the USCG Captain of the Port in the port area through which the shipment is to be made, of the name of the vessel on which the shipment is to be made, and of the time, date, and place of loading. When the initial notification is given in a port area through which the shipment is to be made of the name of the vessel on which the shipment of the Port.
- 12. Any incident involving loss of contents must be promptly reported to this Board.
- 13. This permit does not relieve the shipper or carrier from compliance with any requirement of the DOT regulations, including 46 CFR Parts 146 to 149 of the USCG Regulations, except as specifically provided for herein, or the regulations of any foreign government into or through which the package will be carried.
- 14. This permit expires January 15, 1971.

Issued at Washington, D.C., this 3rd day of January 1969.

/s/E. G. Grundy, Capt. For the Commandant U. S. Coast Guard

/s/S. Schneider
For the Administrator
Federal Aviation Administration

/s/D. W. Morrison
For W. R. Fiste
For the Administrator
Federal Highway Administration

/s/Austin H. Banks
For Mac E. Rogers
For the Administrator
Federal Railroad Administration

ATTACHMENT A - 4 - 3 Page 3

## Continuation of SP 5800

Address all inquiries to: Secretary, Hazardous Materials Regulations Board, U.S. Department of Transportation, Washington, D.C. 20590. Attention: Special Permits.

U. S. Coast Guard
Bureau of Explosives, AAR
Federal Highway Administration
Federal Railroad Administration
Federal Aviation Administration
Atomic Energy Control Board, Canada
U. S. Atomic Energy Commission, Mr. Kaye
Department of Defense, Mr. Edwin T. Loss



# DEPARTMENT OF TRANSPORTATION HAZARDOUS MATERIALS REGULATIONS BOARD WASHINGTON, D.C. 20590

#### SPECIAL PERMIT NO. 5800 FIRST REVISION

Pursuant to 46 CFR 146.02-25 of the U. S. Coast Guard (USCG) Dangerous Cargo Regulations and 49 CFR 170.15 of the Department of Transportation (DOT) Hazardous Materials Regulations, as amended, and on the basis of the October 14, 1970, petition by the Idaho Nuclear Corporation, Idaho Falls, Idaho and the November 5, 1970, petition by Westinghouse Electric Company, Pittsburgh, Pa.:

Special Permit No. 5800 is hereby amended by revising paragraphs (1), (5), and (14) and by adding new subparagraphs (1a), (9a), and (11a), to read as follows:

- "1. Shipments of Type B quantities (S 173.389 (L)) of any radioactive material, in normal or special form, are hereby authorized, as further provided for herein. This packaging, when constructed and assembled as prescribed herein, with the contents as authorized herein, meets the standards prescribed in the DOT regulations, Sections 173.394(b) (3), 173.395(b)(2), and 173.396(c)(3), and 173.398(c). The fissile radioactive material content of each package may not exceed those quantities and material types as limited and prescribed in subparagraphs (a)(2)(ii), (a)(2)(iii), and (b)(2) of S 10 CFR 71 6 of the USAEC Regulations, with such packages to be shipped as either Fissile Class II or III, in accordance with the package transport index limitations or shipment limitations prescribed therein.
- "1a. Each shipper, under this permit, other than the petitioners named above, and the other previously identified petitioners, shall register his identity with this Board prior to his first shipment, and shall have a copy of this permit in his possession before making any shipment.
- "5. The authorized package described herein is hereby certified as meeting the specific requirements of the International Atomic Energy Agency's (IAEA) "Regulations for the Safe Transport of Radioactive Material", Safety Series No. 6, 1967 edition, as follows:
  - a. Marginal C-6.2.2 The package design meets the requirements for Type B packaging for radioactive materials.
  - b. Marginal C-6.2.4 The package design with fissile contents as limited by paragraph (1) meets the requirements for Fissile Class II or III shipments.
- "9a. For shipments by air, a copy of this permit must be carried aboard any aircraft transporting radioactive materials under the terms of this permit. Fissile Class III shipments by cargo-only aircraft must conform to S173.396(g)(1). Fissile Class III shipments by passenger-carrying aircraft are not authorized.
- "11a. For shipments by water, a copy of this permit must be carried aboard any vessel transporting radioactive material under the terms of this permit.

# Continuation of 1st Rev SP 5800

Page 2

"14. This permit expires January 15, 1973."

All other terms of this permit, as revised, remain unchanged. The complete permit currently in effect consists of the original issue and the First Revision.

Issued at Washington, D.C.:

/s/	R. G. Schwing, Capt.
	R: G. Schwing, Capt.
	For the Commandant
	U. S. Coast Guard

25 November, 1970 (DATE)

/s/	S. Schneider
	For the Administrator
	Federal Aviation Administration

18 DEC 1970 (DATE)

/s/	D. W. Morrison
	for W. R. Fiste
	For the Administrator
	Federal Highway Administration

2 December 1970 (DATE)

/s/ Quentin H. Banks
for Mac E. Rogers
For the Administrator
Federal Railroad Administration

9 December 1970 (DATE)

Address all inquiries to: Secretary, Hazardous Materials Regulations Board, U.S. Department of Transportation, Washington, D.C. 20590. Attention: Special Permits.

Dist: a, b, c, d, e, h, i
Keleket/CGR Corporation, Waltham, Mass.
Rutgers University, New Brunswich, N.J.
Department of the Army, Washington, D.C.
General Electric Co., Pleasanton, Calif.
The Ohmart Corporation, Cincinnati, Ohio

# Continuation of 1st Rev SP 5800

Union Carbide Corporation, Tuxedo, New York
Radiation Products Division, Burlington, Mass.
Naval Research Laboratory, Washington, D. C.
J. L. Shepherd & Associates, Glendale, Calif.
Siemens Medical of America, Inc., Union, N.J.
Nuclear Engineering Co., Inc., Morehead, Ky.
Battelle Memorial Institute, Columbus, Ohio
Todd Shipyards Corporation, Galveston, Texas
Materials Evaluation Group, Phoenixville, Pa.
General Electric Co., St. Petersburg, Florida
Westinghouse Electric Corporation, Cheverly, Md.
Westinghouse Electric Corporation, Pittsburgh, Pa.
Cumberland Research Corporation, Port Norris, N.J.
Industrial Reactor Laboratories, Inc., Plainsboro, N.J.
Newport News Shipbuilding & Dry Dock Co., Newport News, Va.

January 1, 1969

# Interim DOT Specification 20WC

- § 178.194 Specification 20 WC wooden protective jacket
- § 178.194-1 General Requirements
  - (a) Each jacket must meet the applicable requirements of § 173.24 of this chapter.
  - (b) Maximum gross weight of the jacket plus the contents may not exceed the following:
    - (1) Spec. 20WC-1: 500 pounds
    - (2) Spec. 20WC-2: 500 pounds
    - (3) Spec. 20WC-3: 1000 pounds
    - (4) Spec 20WC-4: 2000 pounds
    - (5) Spec 20WC-5: 4000 pounds
- § 178.194-2 Materials of construction
- (a) The general configuration of the wooden protective jacket is a hollow cylindrical shell constucted of one-piece discs and rings of plywood or solid hardwood reinforced with steel rods.
- (b) Plywood must be exterior-grade, void-free, douglas fir (or equivalent) not more than one inch thick. Solid hardwood is authorized for Spec. 20WC-2 only.
- (c) Discs and rings must be glued together with a strong, shock-resistant adhesive, such as either of the following:
  - (1) A resorcinol-formaldehyde adhesive, which has been bonded under heat and pressure; or
  - (2) A polyvinyl-acetate emulsion, which has been reinforced with cementcoated nails. The nails must be randomly spaced and must be at least 2-1/2 times as long as the minimum thickness of the plywood discs or rings.
- (d) Full-length steel rods are required for reinforcement and lid closure. For Specs. 20WC-1 and 20WC-2, a minimum of six rods at least 0.25 inches in diameter are required. For Spec. 20WC-3, a minimum of 12 rods, at least 0.375 inches in diameter are required. For Spec. 20WC-4, a minimum of 16 rods at least 0.375 inches in diameter are required, and for Spec. 20WC-5, a minimum of 16 rods at least 0.5 inches in diameter are required. For Specs. 20WC-1 and 20WC-2, steel rods must be equally

spaced around the circumference of the rings and discs, midway between the O.D. and I.D. of the rings. For Specs. 20WC-3 and 20WC-4, bolts may be staggered alternately in two rows, at ±0.5 inches from the line midway between the O.D. and I.D. of the rings. For Spec. 20WC-5, bolts may be staggered alternately in two rows at ± one inch from the line midway between the O.D. and I.D. of the rings. Rod ends must be threaded and secured with lock nuts and steel washers, or equivalent device, to provide at least a one inch diameter bearing surface on each end. Ends of the rods must terminate 0.75 inches below the surface of the plywood for Specs. 20WC-1 and 20WC-2. For Specs. 20WC-3, 20WC-4, and 20WC-5, the ends of the rods must terminate 1.5 inches below the surface of the plywood, and that portion of each end disc which extends beyond the rod ends must be further held in place with lag screws at least four inches long.

- (e) Thickness of wooden shell:
  - (1) Spec. 20WC-1: At least four inches thick.
- (2) Spec. 20WC-2: At least three inches thick. The jacket must be completely encased by a steel shell at least 18-gauge thickness, such as a Spec. 17H steel drum. The steel shell must be vented by at least four 0.25 inch diameter holes, which must be covered with a durable weatherproof tape.
- (3) Spec. 20WC-3: At least five inches thick for the jacket wall, and at least six inches thick for the end discs. In addition, at least three plywood chines, two inches wide and protruding two inches beyond the outer surfaces, must be located at each end and midway along the length of the jacket.
- (4) Spec. 20WC-4: At least six inches thick for the jacket wall, and at least six inches thick for the end discs. In addition, at least three plywood chines, two inches wide and protruding two inches beyond the outer surfaces, must be located at each end and midway along the length of the jacket.
- (5) Spec. 20WC-5: At least six inches thick for the jacket wall, and at least eight inches thick for the end discs. In addition, at least five plywood chines, two inches wide and procruding two inches beyond the outer surfaces, must be located at each end and equally spaced along the length of the jacket.
- (f) Figures 1 and 2 illustrate representative designs.

## § 178.194-3 Closure

- (a) Closure for the wooden protective jacket is provided by the steel reinforcing rods. The end cap (lid) must fit tightly to the body of the jacket to prevent a heat path to the inside of the jacket. The lid joint for Specs. 20WC-3, 20WC-4, and 20WC-5 may not be co-planar with the end of the inner containment vessel.
- (b) Spec. 20WC-2. Locking ring closure, if used, must conform to § 178.104-4. Flanged closure, if used, must have at least eight steel bolts (at least 0.25 inch diameter) and lock nuts (or equivalent device), spaced not more than five inches between centers.

## § 178.194-4 Tests

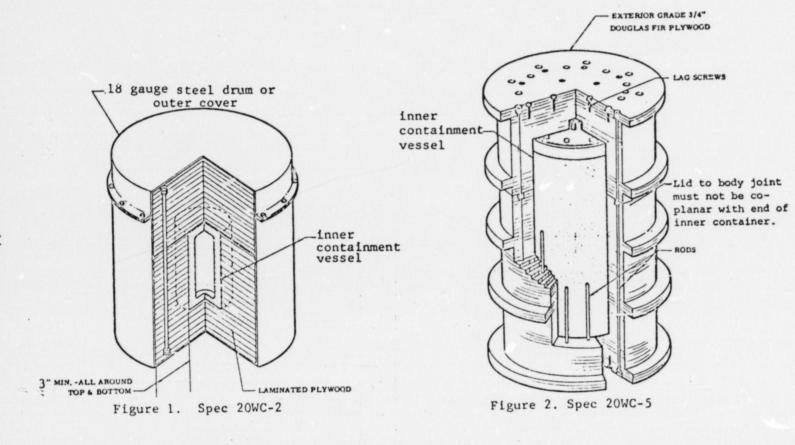
(a) Each jacket must be visually inspected for defects such as improper bonding, cracking, corrosion of steel rods, an improperly fitting closure lid, or other manufacturing defects. Particular attention must be given to any separation of the plywood discs and rings which would provide a heat path to the inside of the jacket.

#### § 178.194-5 Painting

(a) Each jacket must be completely painted with a high quality exterior weather resistant paint.

#### § 178.194-6 Marking

(a) Each jacket must be marked on the external surface as follows: "USA DOT 20WC-( ) TYPE B" and "RADIOACTIVE MATERIAL". The appropriate numeral must be inserted in the marking to indicate the appropriate Spec. 20WC category; e.g., "USA DOT 20WC-2".



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Form 0412 80166 NOTICE 1-70

# RESTRICTED ARTICLES/ARMED GOVERNMENT OFFICIALS NOTICE



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Prepare in Duplicate

1. Captain 2. Station File (For Two Years)

ATTACHMENT A - 5 - 3

Form 0412 80166 NOTICE 7-70

# RESTRICTED ARTICLES/ARMED GOVERNMENT OFFICIALS NOTICE



CAPTAIN. 425 31  FLIGHT CHAPTINGS CITY TALL  (SIGNATURE)		
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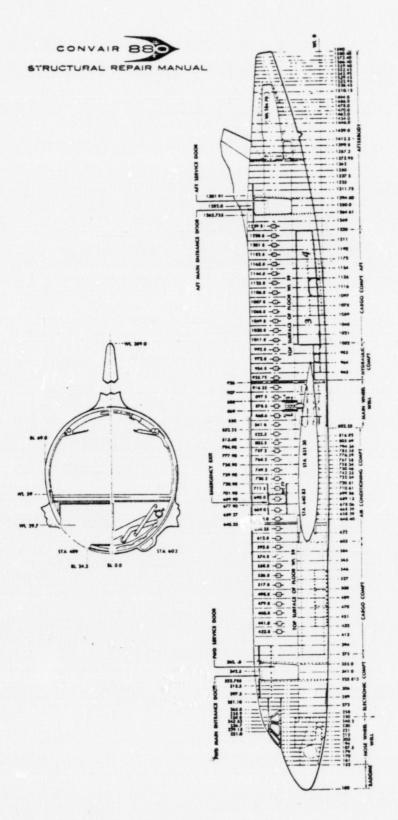
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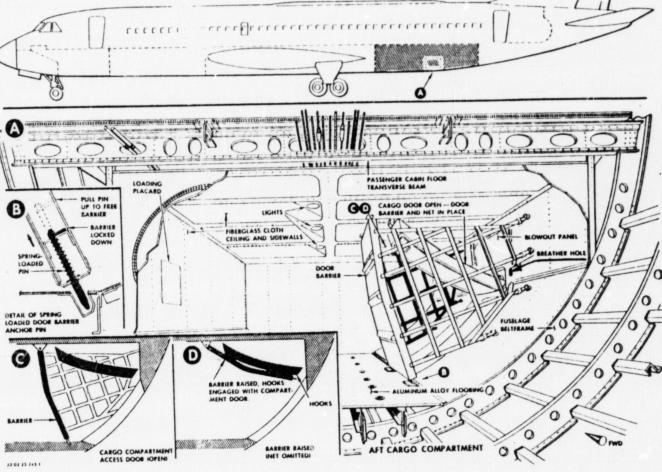
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ATTACHMENT A - 8







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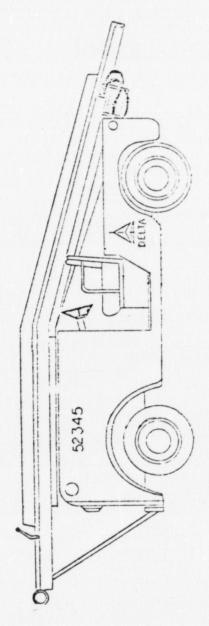
Cargo Compartments, Typical

DELTA AIR LINES, INC.

# STANDARD PRACTICE

CONVEYORS

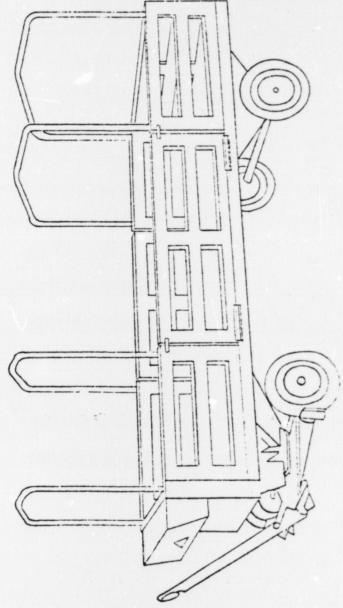
International Scout Conveyor - Model TC-476



DELTA AIR LINES, INC.

## STANDARD PRACTICE

Wollard Baggage Cart - Model BC-450



## RECONSTRUCTION OF SEQUENCE OF INCIDENT NOTIFICATIONS

REF.	DAY/DATE	TIME	CALLER	CALL RECEIVED BY	INFORMATION EXCHANGED
С	SAT./JAN.1	0800-0900	-	-	Hastings Radiochemical picked up shipment from airport. On return driver detected contamination during routine processing.
С	SAT./JAN.1	1330	Hastings	Hastings' Con- sultant HP- Radiation Safety Officer (RSO)	Advised him of probable contamination. (He came in, surveyed packages, and confirmed contamination.)
С	SAT./JAN.1	1430	Hestings-RSO	Texas State Health Dept.	Advised of external contamination
С	SAT./JAN.1	1445	Hastings-RSO	American Biomedical Corp. Dallas (Bio- Nuclear parent company)	Advised of contamination and alerted to possibility of BicMuclear shipment contamination.
С	SAT./JAN.1	afternoon	American Biomedical	BicMuclear	Advised of Hastings receipt of contaminated shipment in same consignment as theirs.
C	SAT./JAN.1	1500-1600	Hastings (Made UNSUCCESSFUL attempt to call	Union Carbide Corp.	Apparently call got through to UCC boiler room. Caller would not identify problem or relay any information.
В	SUN./JAN.2	0700-0800	-	-	BioNuclear driver went directly to airport to pick up shipment. (Neither driver nor Delta knew of contamination at this time.) BioNuclear subsequently verified contamination and transfered remaining contents from containers.
A	SUN./JAN.2	morning	-		Texas State Health Dept. official traveled from Austin to Houston, visited Hastings, and confirmed contamination on packages.
В	SUN./JAN.2	morning	BioNuclear	Delta Air Lines (Freight)	Advised of findings of contamination, to check employees who handled shipment, and how to wash off contamination. (BioMuclear moved containers to quarantine in warehouse.)

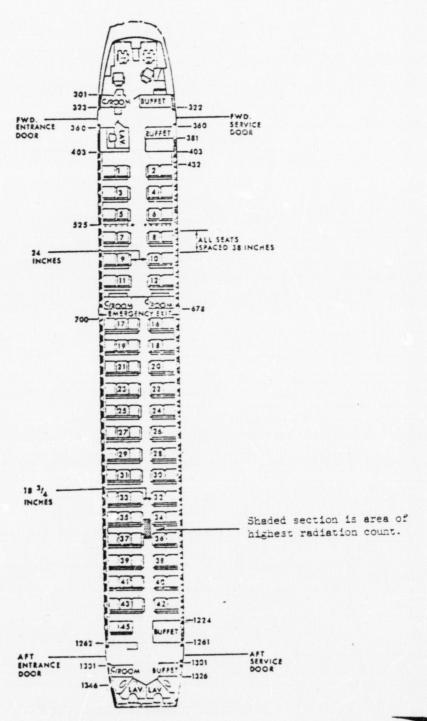
<sup>\*</sup>REF. A - Time reference stated by individual company or agency representative.

B - Time reference approximated by company or agency representative.

C - Time reference approximate and reported by another party.

# ATTACHMENT A - 12 - 2

REF.	I Y/DATE	TIME	CALLER	CALL RECIEVED BY	INFORMATION EXCHANGED
С	SUN./JAN.2	morning	Delta .	Aviation Dept. Airport Security and Fire Dept.	Requested evaluation of condition at Airport Freight Facilities. (Fire Dept. decontaminated.)
A	SUN./JAN.2	1330	Hastings and Texas State Health Dept.	Union Carbide Corp.	To advise of contamination. UCC requested they call Bio Muclear
A	SUN./JAN.2	1400	BioNuclear	Union Carbide	To advise package received contaminated.
	SUN./JAN.2	afternoon	BicMuclear	Texas State Dept.	To advise of contamination. (Representative, already at Houston, arrived soon after at Bioguclear.)
A	SUN./JAN.2	-	Texas State Health Dept. (called from BioNuclear)	Houston City Health Dept.	To advise of contamination. (Both proceeded to airport for survey which revealed additional areas of contamination.)
A	SUN./JAN.2	1500	Delta-Atlanta	Delta-Chicago	To advise of possible aircraft contamination. Requested AEC and Illinois Board of Health be contacted to inspect aircraft which was due to arrive at 1830. (AEC surveyed aircraft and found it contaminated. Aircraft was taken out of service and ferried to Atlanta for decontamination.)
В	SUN./JAN.2	2330	Delta-Atlanta	Union Carbide	Requested UCC call Delta VP to answer questions.
В	MON./JAN.3	0015	Union Carbide	Delta-Atlanta	In response to 2330 request.
В	MON./JAN.3	0400	Union Carbide	Delta, FAA & Georgia State Health Dept. (confer. call)	To determine course of action to pursue.
В	MON./JAN.3	0400	Union Carbide	BioNuclear (at home)	To learn detai arding package as record.
В	MON./JAN.3	0810	Union Carbide	N.Y. State Dept. of Health Dept. of Trans- portation Atomic Energy Comm., Regn.I Compliance	To advise known detals of incident to date.
В	MON./JAN.3	0900	Union Carbide	Another Houston Consignee	To assure his packages were not contaminated. They had been routinely, checked and found to be clean.



GENERAL ARRANGENENT-PASSENGER AREA (96 PASSENGER CONFIGURATION)





## AIR DISTRIBUTION SYSTEM - DESCRIPTION AND OPERATION

#### 1. General

The air distribution system delivers conditioned air from the air conditioning packages to the crew and passenger compartments. A schematic of the air flow is shown on Figure 1. The air distribution system is illustrated on Figure 2. Aluminum and fiberglass ducting is used to deliver the conditioned air to dir inlets along the sides of the cabin just below the hatracks. The location and design of the inlets permit an even distribution of conditioned air throughout the passenger compartment with no drafts at any passenger location. The ducts and inlet vents minimize sound generation by the conditioned air as it moves through the ducts and out of the vents. Additional adjustable air inlets (ventilators) are installed above each passengers seat next to the reading light on lower surface of the hat racks. Conditioned air for the flight compartment is delivered by aluminum and fiberglas ducting and discharged above the flight crew's heads and at their leg level. Adjustable ventilators are installed above and forward of each crew seat (except observer).

Conditioned air in the passenger cabin is exhausted from the cabin through exit vents installed outboard and below the seats. These vents direct the exhaust air into the area below the floor. The flight compartment air is also exhausted to the area below the floor. The air exhausted below the floor in the forward area of the cabin is directed through the electronics compartment for cooling and ventilation of the electronics equipment and then through the electrical compartment and overboard through the forward cabin pressure regulator and out-flow valve, or the electronic equipment cooling valve. The air exhausted below the floor in the aft area of the cabin is directed aft, around and below the baggage compartments to stabilize temperatures in the baggage compartments, and then further aft to the aft pressure regulator and outflow valve where the air is ported overboard.

To prevent odors from entering the passenger areas, all lavatories and buffets are ventilated by a one-way ventilation system. The conditioned air directed to these areas is vented directly overboard through tubing, a venturi to limit flow, and overboard vents.

MAINTENANCE

AFT LAVATORY AREA

AFT BUFFET AREA FORWARD BUFFET FLIGHT COMPARTMENT DISTRIBUTION DUCTS PASSENGER CABIN OVERHEAD CASIN DISTRIBUTION DUCTS HATRACK OUTLET VENTS OVERBOARD VENT CROSS SECTION FORWARD CARGO OUTFLOW 0 0 VALVE AFT CARGO OUTFLOW VALVE OVERBOARD VENT AND VENTURE COMPARTMENT MAIN WHEEL WELL ELECTRICAL COMPARTMENT HYDRAULIC - PNEUMATIC ELECTRONIC EQUIPMENT COMPARTMENT ELECTRONIC COMPARTMENT A-A BUFFET AREAS CONDITIONED AIR
FROM AIR CONDITIONING
SYSTEM HATRACI VENTS VACIAVAL AREAS PLAN VIEW BUFFET AND LAVATORY ANTI-ODOR ONE-WAY VENTILATION FUSELAGE CROSS SECTION ITYPICALI

Air Flow and Pressurization Schematic

MAINTENANCE MANUA

TUBE INSTL AFT SERRENCE OF THE PROPERTY OF TH HATRACK OUTLET VENT THE PARTY OF THE P BUFFET AND LAVATORY ANTI-ODOR, ONEWAY VENTILATION, OVERBOARD VENT-BUFFET AND LAVATORY CABIN COMPARTMENT AIR CONDITIONING VENTS AND DUCTS DUCT INSTL CABIN AIR SUPPLY BUFFET AND LAVATORY FLIGHT COMPARTMENT AIR CONDITIONING VENT AND DUCTS VENT INSTL. - ANTI-ODOR, ONEWAY VENTILATION, OVERBOARD VENT-BUFFET AND LAVATORY BUFFET VENT INSTE FORWARD ELECTRONIC COMPARTMENT VENTILATION AND COOLING DUCTS DUCT INSTITUTION OF STATEMENT AIR CONDITIONING SYSTEM FLIGHT COMPARTMENT AIR
CONDITIONING VENT AND DUCTS

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### INSTRUCTIONS FOR OPERATION OF THE AIRPORT SURVEY POINTS

THE ACTIONS OF THE SURVEY POINT TEAM ARE TO ASSIST DELTA AIR LINES (DAL) AND SHOULD BE AIMED AT ASSURING THE PASSENGERS OF THE AGENCY CONCERN FOR THE PASSENGER. JUDGEMENT MUST BE EXERCISED SO AS NOT TO UNDULY EXCITE THESE INDIVIDUALS. IT SHOULD BE BORNE IN MIND THAT THESE INDIVIDUALS ARE NOT INFORMED ON RADIATION CONTROL. CONSEQUENTLY, INSTRUMENT RESPONSE ON VERY SENSITIVE SCALES MAY CAUSE UNNECESSARY CONCERN IF OBSERVED BY THE INDIVIDUAL. ALSO, THE TEAM MEMBERS SHOULD BE AWARE THAT THEIR REMARKS AND CONVERSATIONS AS HEARD BY THE PASSENGERS ARE SUBJECT TO PASSENGER INTERPRETATION. REMARKS MADE IN JEST AND USE OF WORDS SUCH AS "HOT" OR EXPRESSIONS DENOTING SURPRISE OR UNDUE CONCERN BY TEAM MEMBERS MUST BE AVOIDED.

A DAL REPRESENTATIVE WILL BE THE PUBLIC CONTACT POINT FOR THE SURVEYS PERFORMED BOTH AT THE AIRPORT AND AT HOMES. IT SHOULD BE REMEMBERED THAT SURVEY TEAMS ARE SERVING IN AN ADVISORY CAPACITY TO DAL. ANY RECOMMENDATIONS TO PASSENGERS SHOULD BE MADE BY DAL. DAL WILL PROVIDE TRANSPORTATION OF TEAM REPRESENT. IVES TO HOMES FOR HOME SURVEYS.

- 1. Points are to be manned from 10:00 AM to 10:00 PM by qualified individuals daily beginning January 6, 1972, for 5 days or until no further requests are received and the survey point is shut down by the Delta Station Manager. The number of individuals making up this Survey Point Team should take into consideration that Home Survey Teams may be drawn from the Survey Point Team.
- 2. Delta Air Lines Station Managers will provide space and will assure that passengers are directed to the survey point.
- 3. The area used for survey should have the floor covered with protective paper or plastic sheeting as a precaution.
- 4. Instruments, with appropriate check sources, capable of measuring from one mr/hr to 500 mr/hr, beta-gamma, are to be available.
- 5. Decontamination supplies consisting of absorbent pads, paper towels, rubber gloves, detergent solution, plastic bags, tags, marking pencils, and radiation tags are to be available.
- 6. A record, with copy to the Division of Compliance, AEC, will be made of the survey of each individual and article on the form attached.
- 7. Instrument surveys should be made of all articles returned by passengers on the affected flights. If articles are contaminated the passenger also should be surveyed.

- 8. The action point is a contact reading of 2 mr/hr, beta-gamma.
  - a. If no reading is detected above 2 mr/hr, the passenger is informed that there is no significant contamination and he is allowed to depart.
  - b. If a reading is detected in excess of 2 mr/hr, the team will:
    - (1) Attempt to decontaminate without destruction or damage to the item.
    - (2) If decontamination is successful to 2 mr/hr, the passenger will be so informed. He will be advised that some contamination was detected and removed and an offer will be made to have his home surveyed. Judgment must be exercised in the expression of this offer based on the level and extent of contamination found.
    - (3) If decontamination to 2 mr/hr is not successful, the passenger will be informed that contamination was found which was not easily removed and that fixed contamination is present. The contaminated article should be tagged with the release date that decay would result in a 2 mr/hr level. The passenger should be informed of this and the fact that the article should be stored and not used until the date. Delta Air Lines will store the article if the passenger so desires. An offer should be made to have his home surveyed. Judgment must be exercised in the expression of this offer based on the level and extent of contamination found.

#### 9. Home Surveys

- a. The home survey should be performed promptly. The passenger should be qualitatively informed of survey results by the Delta representative. Passenger property should NOT be destroyed nor confiscated. Rather, the passenger should be informed of acceptable cleaning practices, the fact that the radioactivity will disappear naturally to acceptable levels within a specified time, and some statement of hazard. The date on which decay will result in a 2 mr/hr level should be made known to the passenger.
- b. Adequate records should be maintained of the home surveys. Delta Air Lines should be informed of the results and should serve as the contact point and make all arrangements for the survey.
- c. Upon completion of a home survey, the member of the team that performed the survey should inform the AEC, Division of Compliance, HQ, telephonically of the result (301+973-1000) The caller should ask for Mr. J. R. Metzger or Mr. G. W. Roy. Calls may be made collect.
- d. If a team anticipates that a requested home survey cannot be accomplished within 48 hours, additional assistance should be requested by the AEC Radiological Assistance Team member through Radiological Assistance Team channels.

#### APPENDIX B

SUMMARY REPORT OF NATIONAL TRANSPORTATION SAFETY BOARD SPOT-CHECK OF AN AIR SHIPMENT OF RADIOACTIVE MATERIAL FROM OAK RIDGE, TENNESSEE, TO MONSANTO RESEARCH CORPORATION, DAYTON, OHIO, FEBRUARY 14 - 15, 1972.

Summary Report of National Transportation Safety Board Spot-Check of an Air Shipment of Radioactive Material from Oak Ridge, Tennessee, to Monsanto Research Corporation, Dayton, Ohio, February 14-15, 1971.

Prior to following the shipment of radioactive materials, Board investigators initiated discussions with Atomic Energy Commission (AEC) and Union Carbide (UCC) personnel at the Oak Ridge National Laboratory at Oak Ridge, Tennessee. It should be noted that the UCC operates Oak Ridge National Laboratory for the AEC.

AEC personnel discussed the general background of operating procedures and the details of a

radioactive materials shipment destined for Monsanto Research Corporation, Dayton, Ohio.

That shipment consisted of four 60-pound containers enclosing Americium 241 (half-life 458 years) in solid form with a total weight of 240 pounds. The four units contained a total of 689 curies and the transport index (TI) of each unit was 0.75 for a total of 3.0 TI units. Radioactive Yellow-III labels were required for this shipment which was in DOT 6M Specification containers. On February 15, 1972, the investigators visited the Oak Ridge National Laboratory with AEC and UCC personnel. Among other things, the general discussion disclosed that radioisotope shipments from Oak Ridge have liminished from approximately 13,000 shipments per year in 1961 to approximately 3,000 in 1970. This is the result of AEC phasing out of commercial involvement and the subsequent takeover by private industry. In conjunction with the discussions, a tour of Oak Ridge Laboratory was provided. This tour permitted the observation of various types of packaging, including the Type B Americium packaging. The Americium was packaged as shown in Attachment B-1 of this report.

It was learned that, on occasion, the AEC had utilized air taxi aircraft for transporting radioactive materials. It was explained that present-day utilization of this type of equipment would only occur

under special circumstances.

The investigators observed the final preparation of the specific shipment of Americium 241 to Monsanto Research Corporation, Dayton, Ohio. This preparation included examination of each container by a UCC Health Physicist who measured the TI of each container. The TI was then written in the appropriate boxes on the Radioactive Yellow-III labels, which were affixed to each container. The investigators observed that the measured TI of 0.75 per package was not rounded off to the next highest tenth, in accordance with 49 CFR 173.389(i), when entered on the labels.

The above shipment was transported in a placarded Reliable Transfer Co., van-type vehicle from Oak Ridge to the United Air Lines (UA) Freight Building at the Knoxville Airport. The transfer vehicle departed from Oak Ridge at approximately 3 p.m., arriving at Knoxville Airport at

approximately 4 p.m., where the driver unloaded the shipment.

The shipment was placed in a common storage area where it remained until aircraft loading time, which was approximately 6:30 p.m. The shipment was made on UA Flight 828, a Boeing 737, from Knoxville to Cleveland, Ohio, with an intermediate stop at Pittsburgh, Pennsylvania. This shipment was hand-loaded and placed on the floor in the foremost compartment of the forward cargo bin of the aircraft. In addition to this specific Monsanto shipment, three smaller Type A packages of isotopes were part of the cargo from Knoxville to Cleveland, Ohio. They were for further shipment to Du Page and Urbana, Illinois, and Toronto, Canada.

Examination of the flight papers for this flight (UA Flt. 828), which included the Restricted Articles Notice, showed properly the number of packages, total weight, storage location and total TI

count.

Following the arrival of UA Flt. 828 at Cleveland, Ohio, the shipment of Americium 241 was off-loaded by hand and was transferred to the UA Freight Building and placed in a common storage area.

On February 16, 1972, the Monsanto shipment was hand-loaded on AA Flight 547, a Boeing 727, in the foremost bin of the rear cargo compartment, which is identified as Compartment A. These containers were placed on the floor among other cargo and baggage items.

Other than the separation of compartments by cargo nets, there were no provisions for securing the

radioactive material in place on either flight.

Examination of the Restricted Articles Notice to the AA pilot revealed the following errors:

(1) The TI total showed 0.75 instead of 3.0 (four packages 0.75 each = total 3.0).

(2) The total number of curies showed .75 instead of 177, 219, 175, and 118 respectively, for a total of 689 as shown on the outside labels.

Upon arrival at Dayton, Ohio, the shipment was off-loaded by conveyor belt and transferred to the

AA Freight Building and placed in a common storage area.

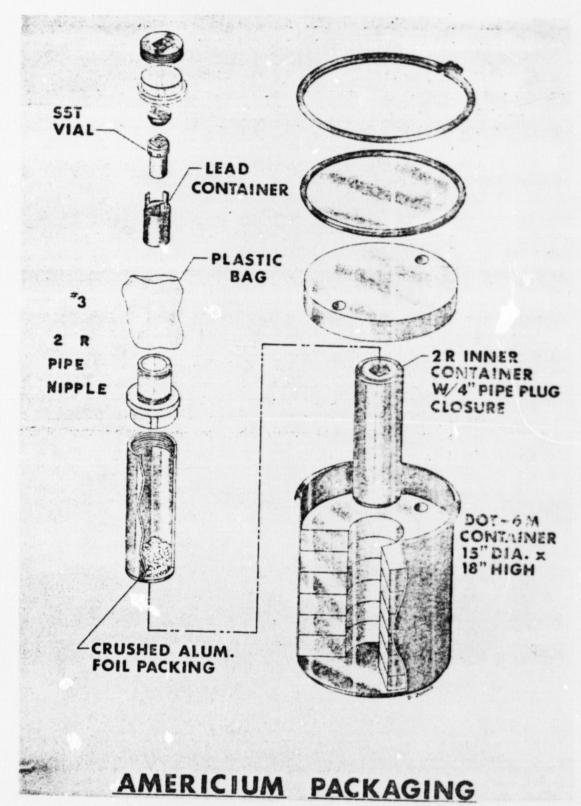
Transportation from the AA Freight Building to Monsanto Research was made by Vandalia Air Freight Company. During final transportation of this material, the Board investigators did not observe an exterior placard indicating, in accordance with Title 49, Part 177.823, that radioactive material was being transported. The shipment was off-loaded by the driver at the Monsanto Research receiving building. The investigators' discussion with Monsanto personnel disclosed that immediate tests for contamination were not made upon receipt.

In order to acquaint themselves with that procedure, the investigators requested that the incoming shipment of Americium 241 be examined for contamination. This was accomplished by Monsanto's laboratory technician who conducted a wipe test with small cloth pads which were then placed in a radioactivity measuring device. The result of this test showed that there was no contamination present.

The Board investigators were advised that Monsanto Laboratory undergoes a routine inspection by

AEC personnel three times a year.

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2	UNITED STATES DISTRICT COURT							
3	SOUTHERN DISTRICT OF NEW YORK							
4	x							
5	THE STATE OF NEW YORK, :							
6	Plaintiff, :							
7	vs : 75 CIV 2121							
8	THE NUCLEAR REGULATORY COMMISSION, et al., :							
9	Defendants. :							
10	x							
11	December 12, 1975							
12	12:30 p.m.							
13	BEFORE:							
14	HON. WILLIAM C. CONNER,							
15	District Judge.							
16	APPEARANCES:							
17	LOUIS LEFKOWITZ, Attorney General of the							
18	State of New York, Attorney for plaintiff,							
19	BY: JOSEPH ZEDROSSER, ESQ. and JOHN F. SHEA, III, ESQ.,							
20	Assistant Attorney Generals							
21	THOMAS J. CAHILL,							
22	United States Attorney for the Southern District of New York,							
23	Attorney for defendants,  BY: CHARLES FRANKLIN RICHTER, ESQ., and							
24	NATHANIEL L. GERBER, ESQ.,  Assistant United							
25	States Attorneys							

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THE COURT: I understand that one of you asked for conference because he wants to file a motion.

MR. ZEDROSSER: Your Honor, on December 3rd we cachambers and indicated that we intended to make ce motions. Actually, we indicated we didn't think theonference at this time would be particularly produ, but we were informed that we should come for one an

The motions that we intend to make are as follows, anill just very briefly capsule them:

One, a motion for preliminary injunction which, be relying on the matters which were previously befoe Court, adds some new affidavits with some new mals and which also clarify the nature of the relief whe seek. I think this is fairly important.

As to plutonium, we continue to seek a cessation oftransport, because as to that material we have the haof accidental dispersion through air crashes.

In addition, of course, as to that material, we coe to maintain that there is a terrorism problem and thlitary assisted surface transport has been shown toignificantly less vulnerable than the present communication of course, as to that material, we coe to maintain that there is a terrorism problem and thlitary assisted surface transport has been shown toignificantly less vulnerable than the present communication of course, as to that material, we compare that there is a terrorism problem and the compare that there is a terrorism problem and the compare that there is a terrorism problem and the compare that there is a terrorism problem and the compare that there is a terrorism problem and the compare that the compare that the compare the compare that the compare that the compare that the compare that the compare the compare that the compare the compare that the compare that the compare that the compare the compare that the compare that the compare that the compare the compare that the compare the compare that the compare the compare the compare the compare that the compare the compare the compare that the compare the compare the compare that the compare the compare the compare the compare that the compare the compare the compare the compare that the compare the compare the compare the compare the compare that the compare the compare

THE COURT: Vulnerable to what?

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MR. ZEDROSSER: Terrorism. This is in the Mason-Leamer affidavit previously submitted.

As to uranium, however, we have a somewhat different situation.

When I speak of uranium, I do not include uranium enriched in the isotope U233. We are not including that in this motion simply because we are not aware of any immediate intent to transport it.

Putting aside that type, as to the rest of uranium, it does not have the same toxic threat that plutonium does. Nevertheless, it can be fashioned in a practical explosive by a terrorism group obtaining it.

In the new affidavit--

THE COURT: Are you referring to uranium enriched in 235?

MR. ZEDROSSER: Yes. That is the other type.

THE COURT: You didn't say that.

MR. ZEDROSSER: I am sorry. That is quite right.

In the new affidavit of Messrs. Mason-Leamer, they point out that there are a number of military assisted air transport alternatives which would be far less vulnerable to terrorist interption than the current commercial air transport system, so that what we are suggesting here and asking for here is as to uranium 235 is a cessation of

commercial air transport and related connected transport.

A number of particular alternatives are set forth.

The one we consider most appropriate is alternative number one, which involves the use of military planes between military bases using military helicopters for short hauls.

This is expanded upon in the Mason-Leamer affidavit.

Beyond that, the new affidavits give some additional indications of irreparable harm. Messrs. Mason and Leamer point out that on the 16th of June of this year, five Arabs were apprehended in Rome near the Leonardo da-Vinci Airport with two Grail missles of the kind that Mason and Leamer had indicated would be a likely weapon to be used, and they were apprehended some two hours before an intended attack on a commercial airliner, and Messrs. Mason and Leamer go on to point out the dangers of transit dispersion if such an airliner were shot down and if it contained plutonium.

Another affidavit which is by a gentleman named Eckols, who is a working American Airline pilot, I should say U.S. airline pilot—it is not American Airlines, I don't think—and who is the chairman of the hazardous materials committee of the Airline Pilots Association. He has a number of things to say about the way in which the transport of these materials is safeguarded in air transit.

Among other things, he points out that there has been extensive accidental radiation from radioactive material, albeit not special nuclear material, in air transport. He has also pointed out there have been numerous errors of shipment involved in the transport of these materials.

One case particulary springs to mind was some material that was shipped to the wrong place and wasn't found until the person who was looking for some shoes that were also transported found them amidst a pile of shoes up in Boston.

THE COURT: These things happen in the case of surface transport, too, don't they?

MR. ZEDROSSER: But the main point here-THE COURT: Cargo gets lost.

MR. ZEDROSSER: I'm sure things get lost in surface transport, but I want to repeat that as to plutonium, we have an additional problem, which is the crash problem.

As to uranium, we are not talking about commercial surface transport, we are now talking about military air transport.

One would hope that the United States Government, through its military arm, when it ships these things will

not lose them amidst piles of shoes.

So much for a brief rundown on the preliminary injunction motion.

Moreover, we ask for summary judgment as follows:

Summary judgment declaring that the defendants

have violated the National Environmental Policy Act and the

CEQ guidelines by not filing adequate environmental impact

statements as required by law.

There is not terribly much to be said about that. With the exception of the Customs Service and the CAB, there has never been any serious effort contesting that they had an obligation to file them and they didn't file them.

We believe as to the CAB and Customs, and we so indicated in the memorandum of law filed on that motion, that as a matter of law, these people did act, commit major Federal actions significantly affecting the environment.

THE COURT: My understanding is that the defendants don't dispute that an environmental impact statement is required by law to be filed and I understood that such an impact statement is in the course of preparation.

Am I correct?

MR. RICHTER: What we have stated--first, as to the latter point, yes, correct, your Honor. The impact statement is in the course of being prepared.

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As to the former, what we have said is that the question is moot. We have taken no position since we said that prior to the commencement of this action we had announced our intention to prepare an EIS.

We have not taken a position on whether we were in violation of NEPA or whether the act required us to prepare one since there was no need to take such a position considering the fact that we had already agreed to do so.

THE COURT: When is it going to be completed?

MR. RICHTER: As to that, there are two stages
in preparing the EIS. One is to prepare a draft statement,
which would issued and made available to the public for
comment, and then the final statement.

In preparation for this conference, I talked with various representatives both of NRC and also of contractors doing studies in preparation for issuance of the draft EIS.

In talking with them, I have been informed that the draft EIS will be issued sometime toward the end of February or the beginning of March of next year.

We had originally told your Honor that it would be prepared at the end of this year. The reason why it is taking longer is that, first, the scope of the EIS was expanded since the time that the original agreement with the

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contractors, namely, Sendia Laboratories and Pacific North-west Laboratories, was entered into. The EIS will cover the transportation of all types of radioactive materials and all modes of transportion.

The major reason for the delay is that Sendia Laboratories prepared a computer model of normal shipments of radioactive materials and also of accident conditions involving the transportation of these materials. This included a lot of work because there were a lot of variables and a lot of factors that had to go into it.

Having established the model, they are now able to feed in different variables and find different results.

I talked with Mr. Robert Luna, who is the supervisor of the environmental research division of Sendia Labs. He says that the first six chapters of the study prepared by Sendia--and I might add that the cost to the Government by the end of the year will be \$210,000 paid just to Sendia alone--that the first six chapters will be delivered to the Nuclear Regulatory Commission by December 15th of this year.

I can describe to you what the first six chapters are about.

THE COURT: No, I think that is unnecessary. I am more interested in the date when the draft will be completed and published.

MR. RICHTER: Specifically, Northwest Laboratories is looking at the actual shipping conditions within the industry and they sent out questionnaires. It took time for the questionnaires to be returned. That study, too, should be gotten shortly to NRC either this year or the beginning of next year.

Once these studies are gotten to NRC, then it has to be reviewed by the staff, it has to then also be reviewed by channels. It takes, for example, two weeks to print the document and, therefore, the estimated time now that it will be issued is either at the end of February next year or sometime in the beginning of March of next year.

But what I want to stress, your Honor, is that the Nuclear Regulatory Commission has been going ahead expeditiously in preparation of the EIS and the reason for the delay is not the fault of anyone but, rather, the amount of work involved and the complexity of the matters involved.

MR. ZEDROSSER: Your Honor, there is an additional matter directed precisely to this point in the relief we are asking for now, and that is summary judgment directing the defendants to make a draft available by December 31st of this year as represented to this Court

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and as noted in this Court's memorandum of opinion of September, to hold hearings thereon in March of 1976, and that is in various parts of the country, including New York City, to accept comments thereon from the interested public through March 31, 1976 and to file a final impact statement on or before June 21, 1976 in light of the representation made to this Court and noted in its memorandum of September that it was going to file a final by the summer of 1975.

The statement made by Mr. Richter just now highlights what we have been saying all along; it shows the
dilatory procedures that the defendants here have followed
and continue to follow, it highlights the need for injunctive
relief. At the very least it highlights the needs for a
mandatory direction that they produce those items by the
dates certain that we request.

They are violating a clear non-discretionary legal duty and they persist in doing so. The reason for putting in the dates for hearings and so forth is very simple:

We don't want these defendants later to use a date certain for the filing of a final as an excuse for the ferminating or curtailing the amount of public comment required on a matter of this importance.

If these gentlemen can take this much time to do

it with the powers of the agencies themselves, certainly then there ought to be some time for the public to comment.

We feel particularly since there is no injunction that has been issued so far, this is really an unconscienable delay.

MR. RICHTER: Can I, if I may, your Honor?

THE COURT: I don't think we need to thrash this out.

I will permit you to file your motions. You will have an opportunity to respond.

Let me say that my present disposition with respect to ordering the Government to complete the environmental impact statement by some arbitrary date that I would
choose, even though it happens to be the same date that they
chose or represented would be achieved at an earlier hearing.

I would not be inclined to do that, as long as I am satisfied that they are moving forward in good faith and with all reasonable diligence to complete it as soon as possible.

Are your papers already prepared and ready to file?

MR. ZEDROSSER: We have, indeed.

At this point I would like the record to show that I am serving upon the U.S. Attorney's office a notice of motion and an affidavit of John F. Shea, III, an affi-

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davit of Messrs. Mason and Leamer, an affidavit of Captain

James A. Eckols, a statement pursuant to Rule 9(g) of this

Court and the plaintiff's memorandum of law.

If they will be so kind as to give me copy received on the originals, I will, of course, see to it that they are filed.

MR. RICHTER: There is one problem here, your Honor, despite the dramatic serving of these papers, and that is the question of jurisdiction of this Court.

As your Honor is aware, the plaintiff has appealed your decision denying the State's motion for a preliminary injunction. That raises questions as to what jurisdiction this Court has to hear motions of this nature.

THE COURT: I don't think that is a serious question. That was not a final decision on the merits and the whole case has not gone up on appeal.

MR. RICHTER: If I may point out, your Honor,

Ideal Toy Corporation versus Seiko Doll Corporation,

302 F2d 623, which was a Second Circuit opinion, 1962, the

Court said that just looking at the appeal of the preliminary
injunction and now the State's attempt to--

THE COURT: That was an appeal of a grant of a preliminary injunction, not a denial?

MR. RICHTER: I believe it was an appeal of a

denial.

--

I have the case here, your Honor.

(Pause.)

MR. RICHTER: I am sorry, looking at a copy of the case I have before me, it was an appeal from an order granting a preliminary injunction.

THE COURT: I think that might be on a different ground, but let me see the opinion.

MR. RICHTER: Yes (handing).

(Pause.)

apposite here for the reason that there Judge Bryan had exercised his discretion to deny the motion for leave to present new evidence in opposition to the preliminary injunction which he had granted, and the Court ruled, "Absent an appeal, it lay within the discretion of the District Court to consider newly presented evidence.

"Once the appeal is taken, however, jurisdiction pass's to the Appellate Court. Thereafter, the appellant is not usually entitled as of right to present new evidence or argument to the trial Court which, in the exercise of a sound discretion, will exercise jurisdiction only to preserve the status quo as of the time of appeal."

In that case Judge Bryan exercised his discretion

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to deny the right or to deny the request to introduce new evidence in opposition to the injunction.

I think I still have the discretion to receive new arguments to convince me that my original ruling was wrong.

Let me say that the evidence will have to be something of a pretty convincing nature in order to pursuade me to change my original ruling.

MR. RICHTER: Your Honor, if I may also note, we have no desire to keep out any evidence from the record which would be relevant or significant and which is different from what has already been presented to this Court. The only reason we pointed out this case is that we were concerned about the jurisdiction of this Court.

If this Court is satisfied that it has a jurisdictional basis, we have no objections.

However, I note that this is a motion for an entirely new preliminary injunction. I think it should be construed rather as a motion for reconsideration or a motion to present new evidence to the Court.

MR. ZEDROGJER: With all due respect, we with some deliberation characterize this as a new motion. Indeed.

I think that distinguishes it even to a greater respect from the Ideal Toy case where they were asked to vacate a

previous injunction.

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We are simply making a new motion and we are

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MR. RICHTER: We are prepared to respond to it.

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ue're hoping that you will look at what we got.

THE COURT: I suppose it is not inappropriate to call it a new motion because you are asking for a somewhat different relief than you asked for before.

. But to the extent that my previous ruling is applicable, it is going to stand.

I will reconsider it only to the extent that you are asking for different relief on the basis of new evidence and, of course, you will have an opportunity to file your opposing papers.

How long would you need, Mr. Richter?

MR. RICHTER: Since we just got these papers and I haven't had a chance to study them--

MR. ZEDROSSER: The return date, your Honor, is December 24th. We did that, frankly, not to bedevil anybody's holidays particularly, but because we did want to hold them to their representation about when they are going to get those papers in.

THE COURT: If the papers get to me on December 24th, they won't be considered until after the 1st of the year because I am going to be gone. I am leaving at noon

on the 24th and I will be gone the following week.

I don't consider the matter so urgent that I ought to change those plans, because for 25 years there hasn't been any release of these materials with resulting damage to anyone or anything.

But I will give you until the 31st, if that is enough time.

MR. RICHTER: Again, not having seen these papers, we might need even more time than that, first, because of the holiday season and, secondly, because of the fact that both Mr. Gerber and myself are swamped with other things to do.

I should also note insofar as plaintiff is seeking a motion for summary judgment on the issue of whether the defendants are in violation of NEPA, they are just wasting, at least as far as I can see, not only the time of the United States Attorney's office but also Court time and I don't think that we should be pressured or the Court should be pressued into promptly responding to a motion which is probably unnecessary.

THE COURT: I am sure the plaintiffs don't think it is unnecessary.

The matter is a matter of considerable importance and I want to give them every opportunity to present the

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evidence that they have.

MR. RICHTER: Then may we ask until the middle of January, your Honor?

THE COURT: I will give you until the 9th of January. That is four weeks from today.

MR. RICHTER: Thank you, your Honor.

THE COURT: I will start on it right away, unless you want some time to file--

MR. ZEDROSSER: We normally would have some time and we certainly want to have some time.

THE COURT: You file your reply papers by the following week, the 16th of January.

MR. ZEDROSSER: Your Honor, I might add that we do ask the Court to consider all of the papers, not only the new ones. I just wanted to make the record clear. I understand what the Court said about not wanting to reopen what it had previously decided. All I want to make equally clear is we are asking the Court to do that.

THE COURT: You need not file anything you have already filed.

The new papers will be considered in conjunction with the papers already filed and the cumulative effect of the papers will control.

MR. ZEDROSSER: Your Honor, there is one other

housekeeping matter of some importance.

Pursuant to Rule 11(d) of the Federal Rules of Appellate Practice, we asked the Court to delay the time for the transmittal of the record to the Second Circuit, which at present is December 16th, to and including February 5, 1976 as indicated in Mr. Shea's affidavit.

If the present relief requested were granted, the prosecution of the earlier appeal is not necessary. If it is denied, it may be desirable to prosecute them simultaneously.

THE COURT: I am not sure that that is relief that I can grant you.

Shouldn't you be applying to the Court of Appeals for that relief?

MR. ZEDROSSER: To the contrary, according to the Federal rules we must come to the District Court first and the Court does have the time to extend it for 90 days from the filing of the notice of appeal, and that is why we--

THE COURT: What rule is that?

MR. ZEDROSSER: 11(d). In the proposed order I have put in February 5th.

THE COURT: Are you talking about the Rules of Appellate Procedure?

MR. ZEDROSSER: Yes, your Honor.

February 5, 1976 is precisely 90 days.

THE COURT: I assume you won't oppose that, Mr.

Richter?

MR. RICHTER: No, we will not, your Honor.

THE COURT: All right.

If you will submit a proposed order to that effect, I will sign it.

MR. ZEDROSSER: Yes, your Honor.

I have one here, and I hand a copy to Mr. Richter (handing).

THE COURT: I have added up here, "The defendants arenot opposing."

MR. RICHTER: If I may just for the record state, we are not opposing this so long as this does not interfere in any way with the schedule set down by the Court of Appeals to hear the appeal.

THE COURT: What is your hurry? This is his appeal.

Are you that anxious for his appeal to be heard in a hurry?

MR. RICHTER: To be quite candid with you, your Honor, I think what is going to happen is that the State is going to try to get all these new papers up before the

Court of Appeals.

**B4** 

I have no qualms with that, except that it is only going to make the appeal even more cumbersome than it presently is. The record is already 1200 pages.

THE COURT: That is up to the Court of Appeals as to whether they want to consolidate, assuming my decision on the new motion is the same as my decision on the old motion and the plaintiff appeals from my decision on the new motion and the Court of Appeals should decide to consolidate the two appeals.

If all of those things happen, I am not sure that it wouldn't be to the best interest of the defendants to have a single appeal rather than to have two piecemeal appeals.

But in any event, I have signed the order and the Court of Appeals will decide whether they are going to consolidate the two appeals, if there are two appeals.

MR. ZEDROSSER: Thank you, your Honor.

THE COURT: You will file that with the Clerk's office?

MR. ZEDROSSER: I certainly shall. I will conform it and file it.

Your Honor, if there should be any inquiry from the staff of the Court of Appeals as to when there might be

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a likely decision, is there any prognosis, assuming that the schedule is adhered to as set forth by the Court?

THE COURT: We get all decisions out within 60 days from the time they are fully submitted.

Further than that, I can't make any promises.

I realize the importance of this matter and I will do the best we can.

MR. ZEDROSSER: Thank you, your Honor.

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JAN 1 2 1976

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

NEW TO CITY OFFICE

THE STATE OF NEW YORK,

- V -

Plaintiff,

AFFIDAVIT IN OPPOSITION

: 75 Civ. 2121 WCC

THE NUCLEAR REGULATORY COMMISSION, ET AL.,

Defendants.

DISTRICT OF COLUMBIA ) : ss.:
WASHINGTON, D.C. )

JACK EDLOW, being duly sworn, hereby deposes and says:

- 1. I am Vice-President of Edlow International Company ("Edlow") which specializes in the transportation of nuclear materials and I submit this affidavit in opposition to New York State's motion of December 12, 1975, for a preliminary injunction.
- 2. Edlow is one of the two leading companies involved in the transportation of special nuclear materials ("SNM"). Its clients include the Indian Atomic Energy Commission, the United Kingdom Atomic Energy Authority, the Republic of the Argentine and many private corporations located in the United States, United Kingdom, Belgium, Germany, Sweden and Japan.
- 3. I have been Vice-Fresident of Edlow since 19/0 with responsibility for transportation of SNM for various clients of Edlow. I received a degree in business administration from George Washington University, where I specialized in the field of transportation. I have spoken on the transportation of nuclear material before the University of Virginia Transportation Seminar, the Atomic Industrial Forum

CR:mb 75-1672 n-1387 Workshop on Physical Protection of SNM and the Institute of Nuclear Materials Management. By virtue of my education, experience and responsibilities I am qualified as an expert on the transportation of SNM.

- 4. I have read the affidavit of Capt. James A. Eckols submitted in support of New York State's current motion for a preliminary injunction in which he makes frequent reference to remarks made by my father, Samuel Edlow, who founded Edlow and who has been a leading figure in the field of transportation of SNM. I am submitting this affidavit in place of my father because he recently suffered a heart attack. Based upon conversations I have had with him, I believe that the views expressed in this affidavit are the same as his.
  - 5. Capt. Eckols apparently claims that at the present time the air transportation of SNM is subject to incompetence and inefficiency resulting in the loss, delay and misrouting of shipments. His only support for this claim is a speech given by my father in 1969, the full text of which is attached as Exhibit 1 hereto.
  - about the security of shipments of SUM, he fails to distinguish the different types of SUM. This is important because most shipments of SUM are of low enriched uranium which cannot be used to make a nuclear weapon and, the refore, pose no problem of security. His concern is really then with strategic quantities of SNM ("SSNM") which, as defined in 10 CFR §73.30, are at least five kilograms of high enriched uranium or at least two kilograms of plutonium or of uranium enriched in the isotope 233.
    - 7. The purpose of my father's speech was to comment on the then recently issued security regulations of the AEC contained in Part 73 of Title 10 of the Code of Federal Regulations. My father believed that those regulations were inadequate for the secure transportation of SSNM.

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He said:

I strongly urge all licenses who are affected by Part 73 to join with me in responding to the AEC invitation for comments. The Regulatory people are a responsive group, and I am confident that constructive suggestions as to means and methods of providing effective safeguards will be given real consideration. None of us can, in good conscience, settle for Part 73 as it now stands. [Ex. 1, p. 8]

3. He suggested that the way Part 73 should be improved would be to require the shipper of SSNM to keep careful track of the material while it was being transported and to expedite its transportation. He said in his speech:

It is our suggestion that the most feasible requirement to be placed on shippers of SNM, measured in the context of the goal to be achieved, be the expediting of each movement from time of pickup at point of origin to time of delivery at destination. By expediting we mean telephonic verification of pickup, transfer at each transfer point, loading aboard vehicles and aircraft, and location of shipments in accordance with pre-arranged scheduling. This method and this method only will provide early notice that shipment is astray or diverted. [Ex. 1, p. 10]

- 9. Effective March 6, 1974, Part 73 was amended to incorporate not only the suggestions made by my father but also far more stringent requirements. Since that time Edlow, which transports more than half of all of the MRC licensee shipments of SSNM made in the United States, has never lost track of or had misrouted any shipment of SSNM.
- 10. Capt. Eckols' affidavit is misleading and inaccurate for he fails to mention these significant changes in Part 73 that have corrected the situation complained of by my father.
- 11. In my opinion, compliance with the current requirements of Part 73 prevents the possibility of loss or

CR:sr 75-1672 n-1387

misrouting of SSNM while being transported. The two principal additions to the regulations which accomplish this is the requirement of continuous visual surveillance and of frequent communications. These can be best described in terms of Edlow's own procedures for transporting SSNM by air. A copy of the full text of the current regulations covering physical protection of SNM in transit is attached as Exhibit 2 hereto.

- 12. When Edlow transports SSNM to an airplane, it is delivered by armored truck with armed guards. Most airports permit the truck to go directly to the airplane. During the time the material is moved from the truck to the airplane it is under continuous visual surveillance by at least one armed guard as required by §73.35. After the cargo hatch is closed, the guard continues to keep the cargo area of the airplane under continuous surveillance and does so until the airplane leaves the ground. Then, as required by §73.35, the guard immediately notifies Edlow that the airplane has left. Pursuant to §73.36, Edlow is also informed that the airplane has landed at its destination or that it has not arrived at its estimated time of arrival.
- 13. For incoming flights, continuous surveillance by armed guards begins as soon as the wheels of the airplane touch the ground until the material is loaded into the armored truck. Edlow is also notified as soon as the airplane arrives.
- 14. While the armored truck is on the road carrying the SSNM, its drivers are in contact with our communications center. Section 73.31 requires that all vehicles carrying

CR:sr 75-1672 n-1387

SSNM contain a radiotelephone which can communicate with the licensee or his agent and that calls to such licensee or agent be made at least every two hours when radiotelephone or conventional telephone coverage along the route is available.

- 15. There is then no time when SSNM is in transit in the United States that we are not aware of its whereabouts and, except when it is on an airplane off the ground, that it is not under the continuous surveillance of armed guards. Thus SSNM cannot be lost or misrouted under current regulations and Capt. Eckols has incorrectly portrayed the current transportation of SSNM.
- 16. In addition, §73.30 requires that transit times of shipments of SSNM be minimized and preplanned to assure that deliveries occur at a time when the receiver at the final delivery point is present to accept receipt of shipments.
- 17. Accordingly, Edlow prepares a detailed transit plan before it ships any SSNM which provides that the armored truck either carrying the material or picking it up will be at the airport before the airplane arrives or departs as the case may be. While §73.35 requires that shipments be preplanned to avoid storage of SSNM in excess of 24 hours while in transit, Edlow does everything possible to avoid such storage. The main reason for this practice is that the regulation also requires that a guard keep the material under continual surveillance during the entire storage period which increases the cost of shipping. Since March 6, 1974, the effective date of the current Part 73, Edlow has only stored one shipment of SSNM while it was in transit and that was only for nine hours.

CR:mb 75-1672 n-1387

- 18. Capt. Eckols also refers to a study made by Edlow and my father in 1971 entitled" "A Factual Study of Special Nuclear Material Shipping Patterns of United States Commercial Organizations and of Unclassified Exports by the AEC and Its Contractors." This study was made at the request of, and under contract with, the AEC, which asked Edlow to examine the feasibility of certain transportation safeguard requirements so that it would know how best to strengthen Part 73.
- 19. At paragraph 6 of Capt. Eckols' affidavit, certain "findings" made in the study are cited out of context. These findings do not show that air transportation of SIMI is inadequate as Capt. Eckols claims, because again Capt. Eckols fails to take into account the 1974 amendments to Part 73.
- 20. For example, the first "finding" cited, that the commercial airline industry cannot avoid en route terminal use, does not mean that air transportation of SSNM is any less secure, because Part 73 now requires preplanning of SSNM shipments to minimize transit time. In addition, Part 73 requires SSNM to be continually guarded while on the ground and limits storage, when it is used, to a maximum of 24 hours.
- 21. The remaining statements and conclusions of Capt. Eckols in his affidavit ale, in my opinion, equally unfounded and risleading. For example, he consistently makes broad statements about the transportation of hazardous materials without specifying whether they apply to SIM. Thus he says in paragraph 15 that most hazardous materials shipments are carried in violation of federal safety precautions. My experience has been with SIM and this statement is false insofar as they are concerned.

CR:mb 75-1672 n-1387

22. Equally false is Capt. Eckols' claim that shippers of SNM constantly ignore or misinterpret the law. Edlow is a shipper of SNM and as can be seen from my father's statements, Edlow has not only followed the law but has made every effort to have the law strengthened so that today Federal regulations ensure the proper air and ground transportation of SNM.

S The Eilen

JACK EDLOW

Sworn to before me this day of January, 1976

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## SAFEGUARDS DURING TRANSFORTATION -A SHIPPER'S VIEWS

Mr. Chairman, members, guests of the Institute of Nuclear Material Management.

I make the grateful for the opportunity of publicly expressing a character views on the subject of safeguards during transportation.

This product of point in time is most appropriate, inasmuch as touny is the chird anniverary of 10CFR Part 73 - three weeks, that is,
for it was three weeks ago today that those of us involved in the
shipping of substantial quantities of highly enriched materials became subject to this new regulation. The value of the regulations
can be assessed in the context of cumulative experience prior to
publication of Part 73.

Let us first address ourselves to the state of the transportation industry. What is the environment into which these materials — which I shall call "strategic materials" in the balance of my talk — are placed? Is the industry efficient, is it trustworthy, can one deliver material to a carrier with confidence that it will be delivered to the consignee reasonably on time and in good condition?

I was part of an informal meeting some few months ago attended by government personnel, representatives of major truckers, railroads, one airline, insurors, and freight claim agents. It was agreed that the transportation industry is so thoroughly infiltrated by the Cosa Nostra that any cargo which organized crime determines to obtain will be obtained. To put it another way - no material is safe during transportation if organized crime decides to lay its hands on the material.

It is an odd coincidence that, on April 9, the date of publication of part 73, the Plain Dealer, Ohio's largest newspaper, featured a first page article under the headline, "Trucker Secondaria Mastermind in Hijack Wave." I quote, in part, from the article:

"The nation's truckers are turning to military methods to protect themselves from hijackers and thieves who are expected to steal \$500 million worth of merchandise from the industry this year.

The problem is so serious that some truckers now:

- . Travel in convoys of twos and threes for protection.
- . Have radio cars, sometimes including armed guards, follow rigs with particularly valuable cargoes.
- . Fence their terminals and install burglar alarms on trucks.

'It's getting so bad that I wouldn't be surprised if one of these days we have a 'shotgun' rider along in the cab.' says an insurance executive.

Who is responsible for the upsurge in highway robbery?

\*There's no question but that it is linked to organized crime, says Frank Mack of the New Jersey Motor Truckers Association.

'About 75% of the thefts made at gunpoint are of cargoes that have been preselected. And there's no doubt that these selections are made by organized crime.'

Mack notes that the success smalltime hoods had in swiping trucks attracted organized gangs.

Robert Kortenhaus, vice president of Bilkays Express, a leading Northeastern truck company, agrees that organized crime is responsible for many of the thefts.

'Who else but the Mafia would have the money to pay the hoodlums that actually steal the cargoes, the warehouses to store the goods and the markets to get rid of it?' days Kortenhaus.

Meyer says many of the hijackings are 'made on order,' for markets waiting for the merchandise."

How very often we read of thefts of bullion, jewelry, watches from secure rooms at air cargo terminals. The hijacking of aircraft is now a weekly occurrence. Today aircraft are hijacked to provide escape means to Cuba. Who here dare say that aircraft will not be hijacked for the nature of the cargo aboard - because of its high value or its strategic nature?

Gentlemen, the transportation industry is infiltrated by organized crime and must be adjudged incapable of providing reasonable protection for valuable or strategic cargo. The transportation industry is untrustworthy.

Have any of you read the newly published book, "The leter Principle"? Dr. Laurence J. Peter, Associate Professor of Education at the University of Southern California, in collaboration with Raymond Hull, writer, elaborates in this tongue in cheek volume on his Principle which states, "In a hierarchy every employee tends to rise to his level of incompetence." Peter's Corollary states, "In time, every post tends to be occupied by an employee who is incompetent to carry out his duties." I urge you to read this volume - it may reshape many of your attitudes.

The transportation industry is a prime example of the validity of the Peter Principle. The high level of incompetency which has been achieved by surface and air carriers staggers the imagination. The inability of the air industry to properly handle the carge handed to it for air carriage now approaches a national scandal. The inability of motor carriers to provide a modicum of scheduled service for LTL shipments, or to follow simple instructions leads me to believe that the validity of Peter's Corollary is proved once and for all by this industry.

Northbound service from the Portsmouth Gaseous Diffusion Plant is provided by only two carriers - Quick Air Freight, whose rights are restricted to delivery to or from an airline, and Commercial Motor Freight. If you propose to ship by other than air from Columbus, Commercial Motor Freight requires at least two days to pick up at Goodyear and to deliver to another surface carrier at Columbus, 75 miles from the plant.

On April 10, I consigned an 8,500 lb. shipment from Goodyear Atomic Corporation to New York, with clear simple routing instructions on the inland bill of lading - "Commercial Motor Freight to Columbus, Mason Dixon to New York."

When we phoned on the morning of April 14 to ask Mason Dixon to make certain material was onforwarded, they told us they had not received the cargo. We then began tracing with Commercial only to learn that, contrary to written instructions, shipment had been delivered to Spector Motor Freight. That's not all—the shipment was now in Cleveland—one place where it certainly was not supposed to be. And gentlemen, be assured that this is not extraordinary—it is in fact routine.

On Tuesday, March 11, we consigned a package (110 lbs.) containing Pu metal from Richland to Pan Am at San Francisco Airport by motor freight, for oncarriage to Germany. Had the surface carrier been competent, material would have been delivered to Pan Am on March 14, and would have arrived Frankfurt March 15. The shipment was not delivered to Pan Am on schedule. Over the weekend the motor carrier discovered that the package had been overcarried and was in Los Angeles. They returned it to San Francisco for us, delivered it to Pan Am on March 17, in time to miss connections. Package finally left San Francisco on March 19 and arrived in Germany on the 20th, five days late, and the object of a frantic search for several hours. Reason—incompetence.

Have you heard about the three famous UF<sub>6</sub> shipments of March, 1969? One was mine. 33 kgs U enriched to 90%, aboard an international flight New York to Frankfurt, had been loaded on a mixed London - Frankfurt pallet. At London, the pallet was removed from the irreraft, and the London cargo was removed. The balance of the pallet just sat there while the aircraft took off and continued to simply sit at London. We were notified by consignee that the flight arrived without the shipment, and we swung into action. The airline quickly found the cargo, still sitting in London. No airline personnel at London or elsewhere had initiated any action. We had to tell the airline that the cargo was missing. Incompetence—you can bet your bottom dollar.

Second famous shipment of March, 1969. Three containers of strategic material, gross weight 850 lbs., left Goodyear on Wednesday, reached Columbus, were taken to Dayton, where they were loaded aboard air freighter for St. Louis for onforwarding to consignee by special truck. Two containers were delivered on Thursday. The third container appeared to be irretrievably lost, but was eventually found nine days later in Boston under a load of shoes. And how was it found—a shoe store was tracing a lost consignment of shoes and Thank God—they found the shoes—with the strategic material underneath. Incompetence—what else?

Third March shipment. Four containers of strategic material were loaded aboard air freighter at Dayton for St. Louis on Friday. Saturday—two of the four were delivered to consignee. No one with the air line could figure out what happened to the other two containers. Tracing followed, and the missing containers were located on Monday at St. Louis Airport, right where they were supposed to be. Incompetence—nothing else.

On March 5 the New York Times carried a story, on page 4, under headline, "Lost UN Stamps Found at Airport." The article reads,

"The United Nations announced today that its missing
1.5 million 10-cent air mail stamps had been found at
Kennedy Airport and delivered to the postal administration here.

Security guards found the two packing cases of stamps among shipments backed up at the airport. Press reports Sunday said that the stamps had not been delivered here after arrival at Kennedy about mid-January.

Story upon story can be told--ad nauseum

To sum up-the environment of the transportation riustry is one of incompetence, criminality, and unreliability.

Little wonder, then, that the AEC orders that rafeguards be taken to prevent loss or diversion of SMM in strategic quantities while it is in the transportation cycle. The concern of the AEC should be applauded and those shippers affected by Part 73 should take every realistic step to implement Part 73, and to recommend changes to provide truly effective prevention if possible, or prompt detection of loss or diversion while strategic materials are in the transportation cycle.

It is my belief that any steps taken in the general area of safe-guarding special nuclear materials while in the transportation cycle should be measured in the context of the goal we are all striving to reach and maintain. Briefly stated, that goal is the ability to prevent diversion to unlawful purposes. Because it may be difficult, if not impossible, to prevent such diversion; our minimal goal must be our ability to determine at the earliest possible moment that such shipments are not moving in adsordance with pre-arranged scheduling. Failure of a shipment to meet with

pre-arranged scheduling may mean that it has merely gone astray, but determination as to what has happened to the shipment must be made at the earliest possible time.

Many of us knew during the past few months that publication of Part 73 was imminent, and we looked forward to it eagerly. At long last we would know just what would be expected of us, and we could relax in the knowledge that our AEC would have taken a giant step forward to make life a bit more secure for all of us by bringing forth a program which could try to prevent diversion or loss, or, at the least, enable shippers to detect incompetence or criminal ty at the earliest moment.

On April 11 I received my April 9 copy of the Federal Register, and there it was--Part 73. I read the regulations once. I read them a second time. I couldn't believe what I was reading--so I read them a third time.

And now emotion took over--at first a tremendous feeling of relief --relief that the requirements were far less stringent than we thought would be the case.

Then came dismay--accompanied by recognition of the fact that the regulations would contribute little or nothing to the goals we believed in.

Then I was overcome by a strange feeling of sorrow--a sadness-- so many had labored so hard and so long to bring forward what? An imaginative new program? A constructive new idea? A method to prevent loss or diversion? A scheme devised to give early notice of loss or diversion?

The answer is a resounding. NO. What we were ordered to use turned out to be a choice of two options, neither imaginative nor new--

a repetition of AEC security procedures, as old as the nuclear program itself, basically unchanged in over twenty years.

And then I felt a sense of calm and of confidence. I know Russ Wischow, General Crowson, Len Brenner. Part 73 as it has first appeared is not worthy of them, nor does it do justice to the funds being spent on their efforts. The General has told us that a series of amendments will eventually appear, designed hopefully to make safeguards during transportation a vital, realistic, meaningful program. I know that this is their goal, and they have certainly a horrendous job ahead in view of the environment in which we are placing strategic material.

I strongly urge all licensees who are affected by Part 73 to join with me in responding to the AEC invitation for comments. The Regulatory people are a responsive group, and I am confident that constructive suggestions as to means and methods of providing effective safeguards will be given real consideration. None of us can, in good conscience, settle for Part 73 as it now stands.

In accordance with Part 73 as it now stands, obviously we'll all use the option of "signature service".

Signature service cannot and will not prevent loss, diversion, or mishandling of cargo. Further, signature service will not give early notice that shipment is lost, unaccounted for, or diverted. At most, it will single out a shipment as being something other than routine. That the regulation provides any more in the way of security, I question. Bill Brobst, in his talk, supported my view. Let us all recognize that Bill knows the transportation industry—he is expert on that subject. I feel bolstered in that I am right in my beliefs when I learn that he concurs.

In other words, Gentlemen, when measured in terms of the goals of preventing diversion or, minimally, early notice of loss, unaccountability, or diversion—Part 73 just plain isn't good enough. The requirements won't do the job. Something more imaginative, more constructive, more pertinent to the facts, to the environment of the transport industry, must be developed. Instead of a giant step forward, I would say that, our forward movement is only barely discernible.

and many of you here today know exactly what I believe and what our organization has done routinely since our very first shipment of SNM. We do it because we know of the incompetency of the transport industry—we recognize that valuable cargo is stolen and diverted every day, because we genuinely care whether our material moves according to pre-arranged scheduling. We don't trust the transport industry to do anything correctly—we are convinced that, left to their own devices, the odds are that our materials will be handled incorrectly, and may very well be lost, stolen, or diverted. And if this happens we want to know it right now.

Because of the environment of the transport industry, any shipper of any cargo should wish to expedite his movements by constant follow through just to make certain his shipment gets to its destination reasonably on schedule. It is a matter of fact that, without such expediting, in most instances his shipment will not arrive at destination reasonably on schedule.

It appears to us that licensees, or consignees as the case may be, involved in movements of SHM should recognize the need to expedite their movements if only by virtue of the need for arrival destination in accordance with production requirements, contract agreements, and economic considerations.

It is our suggestion that the most feasible requirement to be placed on shippers of SNM, measured in the context of the goal to be achieved, be the expediting of each movement from time of pick-up at point of origin to time of delivery at destination. By expediting we mean telephonic verification of pickup, transfer at each transfer point, loading aboard vehicles and aircraft, and location of snipment in accordance with pre-arranged scheduling. This method and this method only will provide early notice that shipment is astray or diverted.

We recognize that such a requirement will impose an administrative problem, and perhaps some additional cost, on the licensee. We would not consider the requirement to be burdensome, and certainly not horribly expensive. When shipments move in accordance with pre-arranged scheduling, the function is easily performed, with its main cost factor being a few long distance phone calls. It is when shipments fail to move in accordance with pre-arranged schedules that the function becomes more time consuming and more expensive, and it is precisely at that point that the time and expense become justifiable. I fail to see how industry can dispute the need for such expediting nor the logic attached to the assessment of the administrative burden and cost factor.

Additionally, or perhaps alternatively, I submit a suggestion. I am intrigued by Paragraphs 70.51 (c)(1) (i) and (vi) of Part 70 of AEC Regulations. In a nutshell this says that each current licensee should have or any new licensee shall submit to the Commission a description of his procedures for control of and accounting for special nuclear material in his possession under license including procedures used in.....shipping special nuclear material, and his administrative control for assuring appropriate implementation of the foregoing procedures. Now this intrigues me for several reasons. Firstly, Part 70 states that present licensees should have already supplied information relative to safeguards in shipping. Secondly, Part 70 recognizes that administrative controls

are a part of such safeguards. Thirdly, in the particular area of safeguards, under Part 70 the AEC has permitted the licensee to set up his own procedures and methods within the limitations of the AEC guide.

I am suggesting that Part 73 may be redundant in that the purposes to be accomplished could well have been and should have been done so under Part 70. Be that as it may, I submit that those licensees affected by Part 73 are responsible, honest, patriotic, and imaginative companies. I submit that the principle already accomplished under Paragraph 70.51 (c) could well be used in this particular area of safeguards during transport, particularly in view of the difficulty faced by the licensing authorities in developing an effective safeguards program. I suggest in a very serious vein that the AEC might well set forth its goals or its aims in a guide, requiring licensees to establish the procedures which they will use in moving materials subject to Part 73, for approval by the licens- . ing authority. If nothing else is to be gained from this method, I foresee that the responses from the licensees might very well produce some new imaginative ideas which the licensing authorities could then compile and correlate into a final set of regulations.

I make this serious proposal by means of this forum in that spirit which says that we have a tough problem to lick, and the more ideas the Regulatory people obtain, the more satisfactory will be that safeguards system which will be established. And furthermore let me remind you that the precedent is clearly established in Part 70.

I am truthfully a bit disturbed. I am here to give my views, as a shipper, on safeguards in transportation. I have not finalized my thinking but, each day I draw closer to the view that, because of the environment of the transportation industries, we may well determine that we will be unable to prevent diversion during this

cycle using realistic means—and note that I emphasize the word "realistic", and that we will concentrate on the problem of early detection and recovery.

Permit me to quote from a paper given by Dr. Kouts. I understood him to say that when responsibility is given, it must be accompanied by authority. This has given me a new insight, and I submit that if licensees are given the responsibility to safeguard SNM while in transport, they must be given the authority to do so. This may well prove to be the crux of the problem.

In concluding his paper, General Crowson asked facetiously, and yet I believe seriously, if nuclear industry and its materials managers were so ----- good, why was it necessary for his office to come into being. I must respond by saying that ther are some of us who are ----- good, and that we do "keep a handle" on strategic materials while in the transportation cycle. Our own organization does know quickly when shipments go astray---Thank God we have been faced with no diversions--only incompetence. Yes, we've made some mistakes. For example, we did not expedite over weekends, but now we either ship only on weekdays, or, when necessary, we now work on weekends. But we, at least, will stand on our record of being ----- good in providing early detection of failure of shipments to move in accordance with pre-arranged schedules, and cur organization established and implemented our homemade methods well over four years ago.

Thank you all for your attention. My special appreciation to all of you for affording me this opportunity. Frankly, I'm disturbed. Like everyone else in this room I believe in safeguards—I believe in peaceful uses—I abhor the idea of diversion to unauthorized uses. But I also believe only in realistic safeguards—certainly not in an exercise of one sort or another which offers little or no prospect of achievement of worthwhile aims, or can achieve its

aims under systems which are unacceptable morally, economically, or legally.

These are our views. I trust that you know me well enough to recognize that they are offered to you in a totally constructive spirit.

Thank you very much.

Samuel Edlow

[Sec. 73.5 (formerly Sec. 73.12) as redesignated November 6, 1973 effective December 6, 1973 (58 F. R. 30539).]

#### [¶ 9307]

Sec. 73.6. Exemptions for certain quantities and kinds of special nuclear material.—A licensee is exempt from the requirements of \$\$73.30 through 73.30 and of \$\$73.40, 73.70 and 73.72 of this part, with respect to the following special nuclear material:

(a) Uranium-235 contained in uranium enriched to less than 20 percent

in the U-235 isotope;

(b) Special nuclear material which is not readily separable from other radiocitive material and which has a total external radiation dose rate in excess of 100 rems per hour at a distance of 3 feet from any accessible surface without intervening shielding; and

(c) Special nuclear material in a quantity not exceeding 350 grams of uranium-235, uranium-233, plutonium, or a combination thereof, possessed in any analytical, research, quality control, metallurgical or electronic

laboratory.

[Sec. 73.6 (formerly Sec. 73.13) as amended and redesignated November 6, 1973, effective December 6, 1973 (38 F. R. 30539); amended November 13, 1975, effective December 15, 1975 (40 F. R. 52841).]

# PHYSICAL PROTECTION OF SPECIAL NUCLEAR MATERIALS IN TRANSIT

#### [ 9308]

\*Sec. 73.30. General requirements.—(a) Except as specified in paragraph \$73.36(a) or as otherwise authorized runuant to \$73.30(f), each because who transports or who delivers to a carrier for transport other unadam 233 (contained in uranium enrelied to 20 percent or more in the U-233 isotope), uranium-233, or plutonium, or any combination of these materials, which is 5.000 grams or more computed by the formula, grams = grans contained U-235 + 25 (grams U-233) + grams Pu), shall make arrangements to assure that such special nuclear material will, if a common or contract carrier is used, be transported under the established procedures of a carrier which provides a system for the physical protection of valuable material in transit and requires are exchange of hand-to-hand receipts at origin and destination and at all points enroute where there is a transfer of custody.

(b) Transit times of shipments other than those specified in \$73.1 b (3).

(b) Transit times of shipments other than those specified in § 73.1 b (3) shall be minimized and routes shall be selected to avoid areas of natural disaster or civil disorders. Such shipments shall be pre-planned to assure that deliveries occur at a time when the receiver at the final delivery point

is present to succept receipt of shipment.

(c) Special nuclear material shall be dupped in containers which are scaled by tanger indicating type sea. The containers shall are be leaded.

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if it is not in another container or vehicle which is locked. If inspection of the container or vehicle is not required by State or local authorities before final destination, the outermost container or vehicle shall also be scaled by tamper indicating type scals. No container weighing 500 pounds or less shall be shipped in open trucks, railroad fiat cars or box cars and sings. This paragraph does not apply to shipments of quantities specified in § 73.1 (b) 3).

(d) When guards are used pursuant to §§ 73.31(c)(1), 73.31(c)(2), 73.33 and 73.35, the licensee shall not permit an individual to act as a guard indess there is documentation that the individual has been qualified by demonstrating an understanding of his duties and responsibilities. The licensee or his agent shall have documentation that guards have been requalified annually.

(e) By January 7, 1974, each licensee shall submit a plan outlining the procedures that will be used to meet the requirements of §§ 72.30 through 73.35 and 73.41 or including a plan for the selection, qualification, and training of armed escorts, or the specification, and design of a specially designed track or trailer as appropriate. This plan shall be followed by the licensee after March 6, 1974.

(f) A licenser or applicant for a license may apply to the Commission for approval of proposed procedures for transport of special nuclear material in a manner not otherwise authorized by the regulations of this part. Such application shall include a description and quantity of the special nuclear material involved, the origin and destination, the carriers to be use, the expected time in transit, the nural er of transfer points, the communications to be used, the vehicle visual identification, and the cargo security and surveillance measures to be used.

(g) Paragraphs (b), (c), (d), and (f) of this section are effective March 6, 1974.

[Sec. 73.30 as added effective February 1, 1973 (38 F. R. 3038); amended November 6, 1973, effective December 6, 1973 and March 6, 1974 (38 F. R. 30535 and 30540); republished December 28, 1973 (38 F. R. 35432).]

#### [ 9309]

† Sec. 73.31. Shipment by road,—(a) All shipments by road shall be made without any scheduled intermediate stops to transfer special nuclear material or other cargo between the facility from which it is shipped and the facility of the receiver.

If the Jonice Precise Commission case notice in the Federal Ban for of November 13, 1974 (20 F. & 6x 12) that it is considering amounting 13 to be desting borns such the and reliable Paragraphy (or to read as follows:

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cency check souts and to be at each stop where time pennits, and should the care, setting and adjuent areas during of me. The centles contributed the dependent should be unless continuous state of the contributed the state of the contributed the state of the contributed the contributed the contributed that the contributed the contributed that the contributed the contributed that the c

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(b) All motor vehicles used to transport special nuclear material shall be equipped with a radiotelephone which can communicate with a increase of his agent. The licensee or agent with whom communications shall be maintained for different segments of the slupment shall be provided as the force a shipment is made. Calls to such licensee or agent shall be made at least every 2 hours when radiotelephone or conventional telephone coverage along the route is available to relay position and projected route. Call frequency may extend up to 5 hours when radiotelephone or conventional telephone coverage is not available along the pre-plannel route, at which time a conventional telephone call shall be made. In the event no call is received in accordance with these requirements, the licensee or his agent shall immediately notify an apprepriate law enforcement authority and the appropriate Nasicar Regulatory Commission Inspection and Enforcement Regional Office listed in Appendix A of this part.

(c) A shipment shall be accompanied by at least two people in the vehicle containing the shipment, which may be two drivers or one driver and an authorized individual. The vehicle containing the shipment shall be under continuous visual surveillance, or one of the drivers or authorized individuals shall be in the cab of the vehicle, awake, and not in a sleeper barth. The shipment shall be further protected by one of the following methods

- (1) An armed escent consisting of at least two guards shall accompany the shipment in a separate escent vehicle. Escents shall maintain continuous virilance for the presence of conditions or situations which might threaten the security of the shipment, take such action as circumstances might require to avoid interference with continuous safe bassage of the cargo vehicle provide assistance to, or summon aid for crew of cargo vehicles in case of emergency, clack scals and locks at each stop where time permits, and observe the cargo vehicle and adiacent areas during stops or layovers. Continuous radio communication espatishty shall be provided between the cargo vehicle and the escent vehicle. Escort vehicles shall also be equipped with a radio-telephone. The licensee may use his own employees as armed escents or he may rise an agent. Only the driver is required in the vehicle mataning special puch ar material for shipments involving an average of less than an hour in transportation, if continuous radiotelephone or radio communication is maintained during the course of the shipment with the licensee or agent monitoring the shipment.
- (2) The shipment shall be made in a specially designed truck or trailer which reduces the vulnerability to diversion. Design features of the truck or trailer shall permit immobilization of the van and provide barriers or deterrents to physical penetration of the cargo compartment unless armed guards are also used in which case immebalization of the venicle is not required
- (d) Transfers to and from other modes of transportation shall be in accordant with \$73.35.
- (c) Vehicles shall be marked on too with identifying letters or numbers which will permit identification of the vehicle under diveloph conditions from the air in fact weather at 1000 feet above ground level. The same visit of letters and admines as the closed on the time shall be becaused on the state of the state of the state of the vehicle or permit steam manner root the ground.
  - Co. The rection is a feetive Marchin, 1973

[The next page is 9409.]

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[Sec. 73.31 as amended December 48, 1289, effective January 30, 1970 (34 F. R. 20.886); amended effective January 11, 1972 (38 F. R. 1274) amended November 6, 1973, effective March 6, 1974 (38 K. 30°33); republished December 28, 1973 (38 F. R. 33432); ometally corrected January 21, 1974 (39 F. R. 2352); amended effective March 3, 1973 (40 F. R. 87°3)

### [ 9310]

\* Sec. 73.32. Shipment by air.-(a) Except as specifially approved to the

\*Sec. 73.32. Shipment by air.—(a) Except as specifially approve 1: the Nuclear Regulatory Commission, no shipment of special inclear mater is shall be made in passenger interaft in excess of (1) 20 grams of 20 curves we have is less, of plutonium or aranium 233, or (2) 350 grams of 20 curves we have tained in uranium curiched to 20 percent or more in the 1-235 is stope. (b) In shipments on cargo abstraft of either uranium 235 comment in uranium enriched to 20 percent or more in the U-235 is stope, or plutonium, or any continuation of these materials which is 50% grams or more compared by the formula grams = (grams continued ti-2,50 + 2.5 (grams U-233 + grams 10), transfers shall be in accordance with \$75.35. Transfers shall be aunimized.

(c) Export shipments shall be escorted by an unarried authorized in lividual, who may be a crew member, from the last terminal in the United States until the shinment is unlocated at a foreign terminal. He shall perform monitoring duties at foreign terminals as described in §73.55

(d) Paragraph (c) of this section is effective March 6, 1974.

[Sec. 73.32 as added November 6, 1973, effective March 6, 1974 (18 F. R. 30530); republished December 28, 1973 (38 F. R. 35482).]

## [[ 9311]

\*\*Sec. 73.33. Shipment by rail.—(a) A shipment by relisinil be escribed by two guards, in the shipment car or an escort car of the train, also shall keep the shipment cars under observation and who still detrain at stops when practicable and time permits to careful the shipment cars under observation, and check car or container looks and seals. Rail to do not contained the shipment cars under observation, and check car or container looks and seals. Rail to do not communication shall be maintained with a license or his agent to elect one every 2 hours or less, and at schooling stops in the event that to refer the event with whom communications shall be maintained for the containers of the with whom communications shall be maintained for the containers of the

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shipment shall be processionated before a shipment is made. In the event or call is received in accordance with these requirements, the Prensey or fits agent shall immediately notify an appropriate law enforcement authority and the appropriate Nuclear Regulatory Commission Inspection and Enforcement Regional Office listed in Appendix A of this part.

b) Transfers shall be in accordance with § 73.35

(c) This section is effective March 6, 1974.

[Sec. 73.33 as added November 6, 1973, effective March 6, 1974 (38 F. 72, 30536); republished December 28, 1975 (38 F. R. 35432); amended effective March 3, 1975 (40 F. R. 8793).]

### [¶ 9312]

† Sec. 73.34. Shipment by sea.—(a) Shipments shall be made on vessels making the minimum ports of call. Transfers to and from other modes of transportation shall be in accordance with § 73.35. There shall be no scheduled transfers to other ships. At domestic ports of call where other cargo is transferred the shipment shall be protected in accordance with § 73.35(a).

(b) The shipment shall be placed in a secure compartment which is locked and scaled. Locks and seals shall be periodically inspected in transit. if accessible, by an escort or crew member.

(c) Export shoments shall be escorted by an unarmed authorized individual, who may be a crew member, from the last port in the United States until the shipment is unloaded at a foreign port. He shall perform monitoring duties at foreign pers as described in § 73.35.

(d) Ship-to-share communications shall be available, and a ship-to-shore contact shall be made every twenty-four hours to relay position information, and the status of the shipment, which shall be determined by a daily inspection where possible. This information shall be sent, as often as it is available, to the because or his agent who makes the arrangements for the protection of the shipment.

(e) This section is effective March 6, 1974.

[Sec. 73.34 as added November 6, 1973, effective March 6, 1974 (38 F. R. 30536); republished December 23, 1973 (58 F. R. 35433).]

#### [7 9313]

‡ Sec. 73.35. Transfer of special nuclear material.—All transfers shall be monitored by a guard. An alternate guard shall be designated at all transfer points to substitute, if necessary. Monitoring of special nuclear material transfers shall be conducted as follows:

fa) At scheduled intermediate styps where special nuclear material is not scheduled for traveler, the quart shall observe the opening of the cargo confit the forms known or management of the design pairs as a correlation to the traveler in the forms and the same and the cargo pairs as a correlation to the traveler in the cargo confit that the forms and the cargo in 1 that care in the care in the care in the care in the cargo in a section of the care in the c 9 9312 10 678 5 73.34

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partment and assure that the shipment is not removed. The greet shall maintain continuous visual surveillance of the cargo compartment. Continuous visual surveillance of the cargo compartment shall be maintained up to the tane the vehicle is ready to depart. The guard shall observe the vehicle until it has departed, and shall notify the licensee or his agent of the latest status immediately thereafter.

(b) At points where special nuclear material is transferred from a vehicle to storage from one vehicle to another, or from storage to a vehicle, the guard shall keep the shipment under continuous visual surveillance by observing the opening of the cargo compartment of the incoming vehicle and assaring that the shipment is complete by checking locks and/or seals. Continuous vessel surveillance of a shipment shall be maintained at all times it is in the terminal or in storage. Shipments shall be prepianged in order to avoid storage times in excess of 24 hours. Continuous visual surveillance of the cargo compartment shall be maintained up to the time the vehicle is ready to depart from the terminal. The guardishall observe the vehicle until it has departed, and shall is tily the liceasee or his agent of the latest status immediately thereafter.

(c) The guard shall be required to immediately notify the currier and the licensee who made the arrangements for protection of special nuclear material of any deviation from or attempted interference with schedule or routing.

(d) This section is effective March 6, 1974.

[Sec. 73.35 as added November 6, 1973, effective Murch 6, 1974 (38 P. R. 30536); repulsished December 28, 1973 (38 F. F. 35433).]

## [[ 9314]

Sec. 73.36. Miscellaneous requirements, was Each because who takes delivery of special auction material tree on board of as he the point at which it is delivered to a carrier for transport shall make the arrangements to a saure that such special nuclear material will be protected in transit as proscribed in \$8,73.30 through 73.35, rather than the person who delivers such shapment to the carrier for transport.

(b) Each heensee who imports special nuclear material shall make arrangements as assure that such material will be for accred in crossic as follows:

(1) An individual designated by the licensee or his agent or as specified by a contract of carriage, shall contain the continue count and commune looks and/or scale for cyclones of tampering, at the first place in the United States at which the shipment is discharged from the arriving carrier.

(2) The shipment shall be protected at the first terminal of which it arrives in the United States and all subsequent terminals as proceed in \$8.73.30 through 77.35 and paragraph (examples of this section).

(c) (l) The halossee who delicers should notice a consult to a correct for transport shall mane in the a six traction and two depends integrable.

(a) Most in a construction of the consultant by a consultant of the consultant by a consultant of the consultant of t

Nuclear Personal Imports

or teletype, of the time of departure of the shipment, and shall notify or confirm with the consignee the method of transportation, including the names of carriers, and the estimated time of arrival of the shipment at its destination.

(2) In the case of a shipment free on board (f. o. b.) the point where it is delivered to a carrier for transport, each licensee shall, before the shipment delivered to a carrier for transport, each licensee shall, before the shipment is delivered to the carrier, obtain written certification from the licensee who is to take delivery of the shipment at the f. o. b. point that the physical protection arrangements required by \$\frac{8}{3}.30\$ through 73.35 for licensee ship tension have been made. When a contractor exempt from the requirements of a Commission license is the consignee of a shipment, the licensee shall, before the shipment is delivered to the earner, obtain written certification from the contractor who is to take delivery of the shipment at the f. o. b. point that the physical protection arrangements required by ERDA Manual or NKG Manual Chapters 2401 or 2405, as appropriate, have been made.

(3) Each licensee who delivers special nuclear material to a carrier for transpiret or releases special nuclear material f. o. b. at the point where it is delivered to a carrier for transport shall also make arrangements with the consignee to be notified immediately by delephone and telegraph or teletype of the arrival of the shipment at its destination

(d) In addition to complying with the requirements specified in paragraphs (e) and (f) of this section, each licensee who exports special nuclear material shall comply with the requirements specified in §§ 73.30 through 73.35, as apparable, up to the first point where the shipment is taken on the vehicle outside the United States. The licensee shall also make arrangements with the point give to be autified immediately by telephone and telegraph, teletype, or cable, of the arrival of the shipment at its destination, or of any such shipment that is lost or unaccounted for after the estimated time of arrival at its destination. arrival at its destination.

(e) Each beensee who receives a shipment of special nuclear material shall (e) Each licensee who receives a shipment of special nuclear material shall delivered the nearly by telephone and telegraph or teletype, the person who delivered the nearerial to a carrier for transport and the Director of the appropriate Nin lear Regulatory Commission Inspection and Enforcement Regulatory Office listed in Appendix A or the arrival of the shipment at its distinction. When an Energy Research and Development Administration (ERDA) hiemses exempt contractor is the consignor, the breasee who is the consignor shall notify by telephone and telephone had believed by the highest of the appropriate Nin lines. exempt contractor is the consigner, the heensee who is the consignor shall notify by telephone and telegraph or teletype, the Director of the appropriate Nuclear Regulatory Commission hispection and Enforcement Regional Onice listed in Appendix A of the arrival of the simpment at its destination immediately, upon being notified of the receipt of the simpment by the heense-exempt contractor as arranged pursuant to paragraph (2)(3) of this section. In the event such a shipment fails to arrive at 15 destination at the estimated time, the consigner, if a hemsel, or in the case of an extent shipment the libensee who experted the shipment, dull manifolders notify by temporary contraction for the present legisland Onice listed in Appendix V of this part and the hemsel or other persecution and Enforcement Legisland Onice listed in Appendix V of this part and the horisector of the appropriate scale in Appendix V of this part and the horisector of the appropriate contraction and the contraction and the persecution and the appropriate of the part of transport. The horizon who had been also believed in a paragraph of the horisector of the part of the persecution and the persecution are persecution and the persecution a Sails right to hope the best to the planning which produced Experience it light to the color of the gradual trace the shirt out.

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Commission as specified in § 73.71. If the licensee who conducts the trace investigation is not the consigner, he shall also comediately report the results of his investigation by telephone and telegraph, or teletype to the consigner.

(g) Paragraphs (a), (b), and (c), and (d) of this section are effective March 6, 1974

[Sec. 73.56 as added November 6, 1973, effective March 6, 1974 (38 F. R. 30536); republished December 28, 1973 (38 F. R. 35434); amended effective March 3, 1975 (40 F. R. 8793); amended November 13, 1975, effective December 15, 1975 (40 F. R. 82841).]

## PHYSICAL PROTECTION REQUIREMENTS AT FIXED SITES [¶9315]

Sec. 73.40. Physical protection: General requirements at fixed sites.—Each licens is shall proved physical protection against industrial salsonage and against theft of special nuclear material at the fixed sites where licensed activities are conducted. Security plans submitted to the Atomic Energy Commission for approval shall be followed by the licensee after March 6, 1974.

[See 73.40 as added November 6, 1973, effective December 6, 1974 (38 F. R. 30540); amended effective March 3, 1975 (40 F. R. 8793) ]

#### [7 9316]

\*Sec. 73.50. Requirements for physical protection of licensed activities.—In addition to any other requirements of this part, each it make the capabilities to operate a first representational for quart to that 50 of this chapter or who possesses or uses aranium 2.15 contained in promount which it to 20 percent or more in the U 2.85 isotoper, utraining 2.35, or plutonium, or a or in any combination in a quantity of 5000 grams or more required by the formula grams \* (grams contained U 2.35) + 2.5 formula U 2.35 + grams update mum, other than on the operation of a much are reacter in crossed pursuant to that 50 or this chapter, shall comply with the following after March 6, 1973.

(a) The real secretic examination (1). The because shall excitlish a security examination, in belong quarks, to protect by its bits against in list trial saliotize and the special nuclear material in his possession against their

 $(2)_{\rm c}$  M least one supervisor of the security organization shall be on site at all times

(3) The boosee shall establish, maintain and follow written occurrity procedures who in document the structure of the segment organization and which detail the shalls of quards, which maintains and other or includes responsible for security.

security.

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CFR: WD 75-1672

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICTOF NEW YORK

THE STATE OF NEW YORK,

- against 
THE NUCLEAR REGULATORY COMMISSION, : 75 Civ. 2121 (W.C.C.)

Et Al.,

Defendants.:

MONTGOMERY COUNTY

SS.:

ROBERT F. BARWER, being sworn, deposes and says:

STATE OF MARYLAND

- 1. I am Chief of the Transportation and Products
  Standards Branch, Office of Standards Development, of the
  United States Nuclear Regulatory Commission ("NRC"). I
  am in charge of supervising the preparation of NRC's Environmental Impact Statement on the Transportation of Radioactive
  Materials by Air ("EIS"). It is intended that this study
  will satisfy the procedural and substantive requirements
  of the National Environmental Policy Act of 1969. I submit
  this affidavit in opposition to plaintiff's motion for a
  preliminary injunction and for partial supmary judgment.
- 2. Almost immediately after its inception in

  January, 1975, NRC declared its intention to review those
  regulations and procedures originally established by the

  ARC pertaining to the licensing and regulation of nuclear
  facilities and materials to determine what changes, if any,
  should be made. As part of that ongoing review process,

  NRC initiated a rulemaking proceeding concerning the air
  transportation of radioactive materials. To assist the
  Cormission in this rulemaking proceeding, my office is
  preparing a document assessing the environmental impact
  resulting from the transportation of radioactive materials.

CFR: WP 75-1672

primarily by aircraft, but also by alternative ground and water modes. NRC had hoped to make the draft document available in December, 1975. However, issuance of the draft was delayed when the scope of the EIS was broadened to include all modes of transportation and again when the computer models underwent revision. I now anticipate that the draft EIS will be completed and made available for public comment in late February or early March, 1976. The final document is expected to be available by early October.

- 3. NRC has contracted with Sandia Laboratories ("Sandia") and Battelle Pacific Morthwest Laboratories ("Dattelle") to assist in preparation of the EIS. Battelle is working to ascertain the types, quantities and distinguishing safety characteristics of shipments of radioactive materials presently being conveyed by each of the transport modes. This information-gathering activity is directed by my office through a Project Manager directly responsible to me. Preliminary data submitted by Battelle is presently under review by the Department of Transportation; the Energy Research and Development Administration; and MRC offices of Muclear Materials Safety and Safeguards, Inspection and Enforcement, Muclear Regulatory Research, Executive Legal Director, and Standards Development.
- 4. Sandia is testing the ability of certain shipping packages to withstand the effects of severe air accidents. This contractual program is under the management of the Office of Muclear Regulatory Research, with testing specifics controlled by a Transportation Research Coordinating Committee composed of representatives from MRC's offices of Muclear Materials Safety and Safeguards, Inspection and Enforcement, Muclear Regulatory Research, and my office. This testing effort is expected to be complete! with respect to existing plutonium shipping packages in January, 1976.

CFR:wp 75-1672

- 5. In a major project separate from the package testing, Sandia is assisting NRC in consolidating existing information with that obtained from the other Sandia and Battelle studies, and in developing impact models depicting current transportation systems. The information and impact models are utilized in assessing the impact of shipments of radioactive materials on the environment. This effort is directed by my office through a Project Manager directly responsible to me. It has thus far involved a seven-month effort by four principal investigators and numerous support personnel from Sandia. To date, two general meetings have been held between the Sandia team and representatives from the NRC Offices of Nuclear Material Safety and Safeguards, Nuclear Regulatory Research, Inspection and Enforcement, Executive Legal Director, Planning and Analysis, and my office. In addition, numerous meetings and other contacts have occurred between the Sandia team and personnel from my office to insure that the impact assessment is done in compliance with URC directions.
  - analysis of the environmental impact of transporting radioactive materials in accordance with safety and safeguards requirements of the NMC, the transportation safety requirements of the Department of Transportation (Federal Aviation Administration, Federal Highway Administration, United States Coast Guard, Office of Hazardous Materials, Federal Railroad Administration), and applicable state and local regulations. It will also include an evaluation of the environmental impacts of shipping, under both normal and accident conditions, all types and forms of radioactive materials which are presently transported by air, land and water.

7. Portions of the draft EIS have already been distributed for review and comment by appropriate Department of Transportation and NRC personnel. Upon completion, the draft EIS will be circulated to other interested federal agencies, and it will be made available to the public. I wish to point out that the time between publication of the draft EIS in late rebruary or early March, 1976, and the estimated completion of the final document in October, 1976, is required for receipt of comments from the public and interested agencies, as well as for revising the draft statement. These comments will be incorporated into the final EIS which will be used as a basis for MRC rulemaking.

S ROBERT F. BARRER

Subscribed and sworn before me this day of January, 1976.

NOTARY PUBLIC

NOTARY PUBLIC

My Commission expires Job / 1604

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

THE STATE OF NEW YORK,

Plaintiff,

-against-

AFFIDAVIT IN FURTHER SUPPORT OF PLAINTIFF'S MOTIONS

THE NUCLEAR REGULATORY COMMISSION, et al.,

Defendants.

Derendance.

STATE OF NEW YORK )
: SS.:
COUNTY OF NEW YORK)

JOHN F. SHEA, III, being duly sworn, deposes and says:

- 1. I am an Assistant Attorney General in the office of LOUIS J. LEFKOWITZ, Attorney General of the State of New York, and I make this affidavit in further support of plaintiff's motions for a preliminary injunction and summary judgment.
- 2. The January, 1976 affidavit of Robert F. Barker of the Nuclear Regulatory Commission ("NRC") states that the preparation of an Environmental Impact Statement on the Transportation of Radioactive Materials By Air ("FIS") "is intended to satisfy the procedural and substantive requirements of the National Environmental Policy Act of 1969." (p. 1) It is still not clear, however, whether this "study" will include an assessment of several items such as ERDA shipments by air of special nuclear materials ("SNM"). Compliance with NEPA is, of course, an impossibility if ERDA actions are not subjected to scrutiny under the Act.
- 3. The NRC may or may not issue further environmental impact statements, in addition to the generic EIS, in an attempt to satisfy the NEPA mandate. Compliance with NEPA would be an

impossibility if all that was conducted was a generic review of these federal actions. Many issues not amenable to generic treatment are involved in the air transport of SNM. For example, the site-specific problems of such transport through the individual metropolitan regions of New York, Los Angeles, Detroit or Minneapolis-St. Paul, do not lend themselves to treatment in a single generic EIS. Similarly, for example, the issuance of at least some licenses by NRC, and at least some ERDA shipments, will do not lend themselves to treatment in individual EIS's. It must be remembered that plaintiff maintains that individual federal actions of licensing, approving, allowing or executing, directly or indirectly, the air transport of special nuclear materials constitute separate major federal actions significantly affecting the environment and requiring environmental impact statements.

- 4. Finally, procedural compliance with NEPA will only be possible when environmental review procedures implemented, including EIS preparation, are truly adequate under the Act.

  This issue may not be prejudged.
- 5. The Jackson Amendment restricting certain air shipments of plutonium by ERDA was signed into law on December 31, 1975.
- 6. In defendant's memoranda of law in opposition to plaintiff's earlier motion for a preliminary injunction, air transport of SNM was seen as being vital to the U.S. role of being a "dependable supplier" of SNM abroad. "Our role as a principal supplier of nuclear materials permits the United States to further its foreign policy objective of curtailing the proliferation of nuclear weapons." (Def. Mem. of Law, June 6, 1975, p. 5).

It is significant that, on Monday, January 19, 1976, the first chairman of the former Atomic Energy Commission,

David E. Lilienthal, said that the United States must immediately and unilaterally "Order a complete embargo to the export of all nuclear devices and all nuclear material" to avoid the "impending disaster" of the rapid international spread of nuclear bombs. (New York Times, January 20, 1976, p. 2, cols. 4-6, copy attached as Exhibit "A").

7. It is respectfully requested that the affidavit of Messrs. Mason and Leamer, dated 20 January, 1976, be sealed.

JOHN F. SHEA, III

Sworn to before me this 20th day of January, 1976

Assistant Attorney General of the State of New York

## U.S. Export Ban on Nuclear Equipment Urged by Former Atomic Energy Chief

Dr. Bethe recommended that Congress immeditely pass a law forbidding the export of the so-called "breeder reactor." This reactor, now under develop-ment by the United States, is designed to create more pluto-nium than it burns. In addition

by DAVID BURNRAM

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UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

THE STATE OF NEW YORK,

Plaintiff,

AFFIDAVIT IN FURTHER SUPPORT OF PLAINTIFF'S : MOTIONS

-against-

THE NUCLEAR REGULATORY CONTRISSION, et al.,

Defendants.

STATE OF NEW YORK )
: SS.:
COUNTY OF NEW YORK)

THEODORE T. MASON and ROBERT R. LEAVER, being duly sworn, depose and say:

#### Introduction

- 1. The purpose of the affidavit submitted by ourselves dated 16 June, 1975 was to (1) demonstrate that there is a substantial likelihood that a highly motivated group of terrorists could be successful in destroying, or seizing for destructive use SNM in the course of air transport, or related connecting transport, notwithstanding existing safeguard regulations and/or actual practice, and (2) argue that the military has the current safeguard capability to move SNM by surface transport which is significantly less vulnerable to terrorists than commercial air transport and related connecting transport.
- 2. The purpose of the affidavit submitted by ourselves dated 30 November, 1975 was to augment and refine the affidavit of 16 June, 1975, principly by addressing the question of air transport of uranium as opposed to plutonium and the vulnerability of commercial air transportation systems currently employed industry-wide as compared to a variety of military assisted air transport systems.

1171

### Purpose of This Affidavit

3. The purpose of our current affidavit is to restate our positions as outlined in the two above-noted affidavits and, further, to (1) respond to arguments raised in the defendants' answering affidavits insofar as they relate to the vulnerability of transportation alternatives to the threat of terrorist action, (2) provide an assessment of the impact of recent changes in Part 73 of Title 10 of the Code of Federal Regulations, and (3) present recent information contributing to the argument that there exists alternative military SNM transport capability that is less vulnerable to terrorists than the current commercial system.

## J. Edlow, Affidavit of January, 1976

- 4. In paragraph 6. of his affidavit, J. Edlow's reference to "strategic" quantities of SNM misses the point. Apparently Edlow is referring to the fact that CFR Sec. 73.30 sets minimum requirements for NRC licensee shipments of certain amounts of SIM computed by formula, which include 5,000 grams or more of U235 enriched to 20 per cent or more, or 2,000 grams or more of plutonium. This regulation fails to cover various significant dangers. For example, any amount of PuO, if used as a dispersant, could cause death and injury. Also, the psychological aspects of SNM seizure are almost equally as real whether the material is low or highly enriched, or in small or large quantities. Any amount of SNM in the hands of a terrorist group would be of great blackmail value and could certainly be used to their advantage. Finally, the factor of multiple thefts must be taken into consideration, with the possible stockpiling of seized SNM.
- 5. In paragraph 3. Edlow's concurrence with his father's recommendation of "expediting" falls short of accomplishing the task of deterring a determined terrorist group

from successful seizure of SNM. The statement that "[t]his method and this method only will provide early notice that shipment is astray or diverted" is somewhat after the fact and does not preclude the possibility of diversion by seizure or hijacking. The only reaction to the discovery, or "early notice," that a shipment is diverted, is to notify the NRC or "an appropriate law enforcement authority." This is not security in the prevention sense and unless a more secure mode of transport is provided at the same time, seizure is not prevented and potential for recovery may be meager.

6. As we have indicated in our earlier affidavits, one of the weakest links in the current security chain with respect to prevention of successful terrorist action is the wide dissemination of advance shipment information. "Expediting," as described by Edlow, is directed toward loss through misrouting or causual theft. However, such programmed pre-scheduling of times, routes, mode of transport, etc., provides precise information on shipment movement and unless access to such information is strictly limited, may add to a successful terrorist act. According to Peter N. Skinner, affidavit of April 29, 1975, a minimum of 124 people had knowledge of the details of the arrival of a specific shipment of plutonium before it arrived at J.F. Kennedy Airport from Brussels on February 25, 1975. As can be seen, the question of knowledge prior to shipment is one of the greatest short-comings of the civilian transport mode and one of the advantages of the military mode. Mr. Edlow at paragraph 15 of his affidavit stated categorically that "SSIM! cannot be lost or diverted under current regulations . . . . " Such an unqualified statement raises questions about his expert objectivity. We would not categorize the current system as failsafe.

- 7. In paragraph 11, Edlow's reference to the two principal additions to the regulations which "prevents the possibility of loss or misrouting of SSN: while being transported", i.e., "continuous visual surveillance" and "frequent communications," again oversimplifies terrorist and related security problems. Adherence by shippers to these two requirements is intended to provide a degree of protection against misrouting and casual theft, but standing alone, it is inadequate protection against determined terrorist attacks and organized theft.
- 8. Further, a report prepared for the NRC, released only in December, 1976 (MITRE Technical Report 7022, September, 1975, The Threat To Licensed Nuclear Facilities ["MITRE Report"] para. 3.12.3, page 88) points out the inadequacy of current communications systems, "One weakness in the operation of these private firms involves the communication system and the difficulties incurred during communication blackouts. Vehicles equipped only with a radio-telephone to handle communications to a base station are subject to periodic blackouts due to terrain and atmospheric conditions. Thus, to comply with a necessary two-hour check with headquarters [10 CFR Sec. 73.31] the driver must on occasion leave his vehicle and use a hand-line telephone. During these blackout periods and during the time the driver leaves his truck to use a telephone, the potential for a hijacking or theft is increased."
- 9. Regarding Edlow's statements (Aff. paras. 12-14) concerning delivery by armored truck with armed guards, one should note that the MITRE Report, para. 3.12.4, page 69, points out:

"It should be noted that armed guards of an interstate shipment have no statutory authority to carry weapons in states other than the one in which they are licensed or across state lines, yet regulations require that they carry weapons in exercising their primary duty of protecting SNM in their custody. These guards are probably often in violation of both state and federal laws."

In other words, the fact that a guard is armed, and in an armored truck, is not necessarily a strong deterrent to terrorist or organized attack; the guard probably knows that he may be in violation of a state or federal statute or law, and, when faced with an armed attack situation, may simply not use the weaponry available for fear of legal, as well as physical, consequences to himself.

vations and conclusions stated in this and our earlier affidavits regarding the inadequacies of the requirements regarding visual surveillance and communications and armed guards, as outlined by NRC's 10 CFR Part 73, of April, 1975.

# Captain James A. Eckols, Affidavit of 28 November, 1975

11. Captain James A. Eckols' affidavit of 28 November, 1975 recounts numerous terrorist acts occuring aboard commercial aircraft and/or associate with commercial air facilities and installations. The MITRE report itemizes no less than 26 commercial aviation-related terrorist acts in the last 6 years. These findings are consistent with the view expressed in our earlier affidavit that successful terrorist action against

commercial aviation is feasible. We believe that transport of SNM in commercial aircraft provides the terrorist with particularly attractive incentive for action.

# Assessment of 10 CFR 73 through 73.36 and 73.72 as Amended

- we stated that the regulations as republished on December 28, 1973 were not adequate to prevent or deter a determined group of terrorists from succeeding with their mission. Those regulations were the regulations in effect on March 4, 1974. A review of 10 CFR 73.1 through 73.36 and 73.72 as amended through December 15, 1975, was made 1. determine whether amendments after March 4, 1974 would substantially alter our assessment of the vulnerability to terrorist action of SNM carried in commercial transport.
- these Part 73 regulations remains that of protecting against loss, misrouting and casual commercial theft. Assuming full compliance with the letter and spirit of those sections of Part 73 by all responsible parties (an assumption with which we disagree), the amended regulations do not provide for adequate personnel, equipment or procedures to effectively deter and prevent successful terrorist action or organized theft.
- 14. The requirements of Part 73 which may give the appearance of providing good security are grossly inadequate.

  Among the inadequacies are:
  - shipments of less than 5000 grams of SNM are not covered;
  - (2) though plans for selecting, qualifying and training guards as well as for specially-designed trucks are called for, neither minimum standards or implementation dates are specified;

- (3) the number of guards provided for and their arming is minimal;
- (4) communication requirements in terms of the frequency of communication in transit as well as the number and capability of communication channels is inadequate.
- 15. The Mitre report states: (para. 3.12.5, pp. 89-90)
  - "a. A wide dispartiy (sic) presently exists in the various screening techniques used in selecting guard personnel and in the training they receive.
  - b. So long as contact is not always possible with vehicles carrying high security material, the present communication system will contain weaknesses. Response capability suffers accordingly.
  - c. Armored vehicles used to transport SNM currently vary in construction and in the extent of denial and immobilization features.
  - d. The present regulations do not provide a sound legal basis for the carrying or emergency use of weapons by guards transporting SNM across state lines.
  - e. Escort vehicles on overnight and long distance hauls frequently have no sleeping accommodations; thus occupants must rest in an upright position."

16. The Mitre report contains extensive corroboration of numerous points made by us in our current and previous affidavits e.g.:

Terrorists -- 54 pages directed to the history,
tactics, capabilities, affiliations,
motivations and recent activities of
terrorists operating throughout the
world. (Mitre Report, pp. 1-55)

Transport Industry -- 10 pages devoted to the

extensive role of crime,

corruption, employee colusion,

and international influences in

undermining industry services.

(Mitre Report, pp. 55-64)

Weapons -- 6 pages citing types of weapons, their availability and recent employment by terrorists. (Mitre Report, pp. 65-70)

Conclusions reached include "terrorism has become commonplace in the Western World and weapons of large caliber and full-automatic fire can be easily procured," and "a veritable army of criminals and hoodlums in this country is waiting and willing to undertake any activity, including murder, if the profit justifies it."

commercial transportation industry described by Sam Edlow in the 1969 speech attached to J. Edlow's affidavit as Exhibit 1 have not substantially improved. Sam Edlow characterized the industry as untrustworthy (Exhibit 1, p. 3) and incompetent (Id. p. 9) and the environment in which the industry operates as one of criminality (Id. p. 6). Indeed he felt that the most that might be accomplished by strengthening requirements within the commercial industry might be early detection and recovery, rather than prevention (Id. pp. 6, 10, 11, 12). As pointed out above in paragraphs 5, 6 and 7 current regulations regarding

what Sam Edlow called "expediting" refect a goal of detection, rather than prevention, of diversion.

18. As to demonstrating that the commercial air system is potentially unsafe from the terrorist threat viewpoint, the recent bombing of LaGuardia Airport is indicative of a level of vulnerability to terrorist activity which far exceeds the vulnerability of military controlled systems, vehicles and installations.

#### Recent Information

19. We note that in a January 12, 1976, p. 11, col. 1

New York Times article by David Burnham, the following was reported:

"The commission [NRC], however, is considering recommending the possibility that an existing Defense Department agency such as the Army's special forces be given training to enable it to react to a situation where a terrorist band seizes and holds a nuclear facility for a relatively long period of time."

Moreover, it was stated in the New York Times,
January 18, 1976, News Of The Week in Review, p. 3, col. 2:

"The Federal Nuclear Regulatory Commission is preparing to recommend that Congress consider, instead of creating a special police force to guard nuclear power plants, training Army units to prepare for attacks on the installations by terrorist groups."

It is clear that even defendant NPC now considers military safeguards against terrorist attack against nuclear facilities and materials to be necessary and desirable.

MUTUL (- MASON

ROBERT R. LEAMER

Sworn to before me this 20th day of January, 1976

Assistant Attorney General of the State of New York

UNITED STATES COURTHOUSE
NEW YORK, NEW YORK 10007

WILLIAM C. CONNER
UNITED STATES DISTRICT JUDGE

March 26, 1976

John F. Shea, III, Esq. Assistant Attorney General Two World Trade Center New York, New York 10047

Re: The State of New York v.
The Nuclear Regulatory
Commission, et al.
75 Civ. 2121 (WCC)

Dear Mr. Shea:

Charles Franklin Richter, who as you know is the Assistant U.S. Attorney in charge of the above-captioned action, has delivered a copy of the Draft Environmental Statement on the Transportation of Radioactive Material by Air and Other Modes to chambers. He has also advised me that you have been supplied with a copy of the Draft Statement.

The Judge has indicated to me that he intends to refer to relevant portions of the Draft Statement in preparing his Memorandum on your presently pending motions for summary judgment and preliminary injunction. He feels, however, that before he does so, you should have an opportunity to comment on the Draft Statement. Accordingly, the Judge is going to refrain from filing a Memorandum in this matter until you have had such an opportunity.

The Judge would also like you to comment upon whether an evidentiary hearing would be necessary to resolve the factual issues raised by your motion for preliminary injunction, e.g., whether military ground transport of plutonium and non-commercial air shipments of other SNMs is in fact substantially safer than the present modes of transport, or whether the preliminar injunction can be granted upon the affidavits.

The Memorandum will be filed immediately after your comments on the Draft Statement are received.

Sincerely,

David Aronson

Senior haw Clerk

DA:1t

cc: C. F. Richter, Esq.

DELIVERED BY HAND STATE OF NEW YORK DEPARTMENT OF LAW PHILIP WEINBERG LOUIS J. LEFKOWITZ ASSISTANT ATTORNEY GENERAL ATTORNEY GE ERAL IN CHARGE OF TWO WORLD TRADE CENTER ENVIRONMENTAL PROTECTION NEW YORK, N.Y. 10047 BUREAU TELEPHONE: (212) 488-7568 April 2, 1976 Honorable William C. Conner United States District Judge United States Courthouse Foley Square New York, New York Re: State of New York v. Nuclear Regulatory Commission, et al. 75 Civ. 21 1 (WCC) Dear Judge Conner: On Monday, March 29, 1976, we received by mail from the United States Attorney's office a Draft Environmental Statement on the Transportation of Radioactive Material by Air and Other Modes ("DES"). On the same day we received a letter, dated March 26, 1976, from your senior law clerk, David Aronson, in which he stated that Your Honor had indicated that you intend to refer to portions of the DES in preparing your Memorandum on the presently pending motions for summary judgment

The State of New York respectfully urges that the Court not consider the substance of the DES on any of the pending motions. Certainly the substance of the DES\* is not relevant to either the motion for summary declaratory relief or the motion for summary mandatory relief.

and a preliminary injunction.

<sup>\*</sup>Even the fact of the availability of the DES, as opposed to its substance, has only a limited effect on the matters before the Court. The motion for mandatory relief sought, inter alia, a direction that defendants make available by a date certain a draft generic environmental impact statement concerning the transport of all special nuclear materials. However, the DES does not appear to deal, even generically, with the transport of SNM by the Energy Research and Development Administration.

As to the pending preliminary injunction motion, there is good reason why the DES ought not to be considered. A review of the relevant chronology may be helpful. This motion was brought on by notice and affidavits served and filed on December 12, 1975. The last affidavit on the motion was served and filed on approximately January 20, 1976. At the conference at which the motion papers were served, we suggested to the Court that it would be beneficial to delay the appeal from the order denying the previous preliminary injunction motion until the preliminary injunction motion on the preliminary injunction motion motion is decided (Transcript, December 12, 1975, p. 18).

Thereafter, on approximately February 19, 1976, we moved in the Second Circuit for limited deferral of the appeal from the order denying the first preliminary injunction motion and from the order dismissing the complaint as against the Civil Aeronautics Board and the U.S. Customs Service. In a supporting affidavit, John F. Shea, III, stated that plaintiff wished to bring up any possible appeal from the now pending motions at the same time as the appeals already in the Second Circuit, because this would lessen the burden on the Court of Appeals and the parties. He stated that he had been informed by your law clerk that a disposition of the pending motion would be made on or before March 31, 1976, and requested that the due date for the filing of the appellant's brief and appendix be deferred to April 16, 1976, and that the argument be deferred to June 7, 1976.

The defendants did not oppose the motion and it was granted on March 1, 1976. On March 3, 1976, defendant Nuclear Regulatory Commission ("NRC") advised Assistant U.S. Attorney Charles F. Richter that the DES, which had been expected by the beginning of March, would not be released until on or about March 23, 1976, because of the need for "technical review."

It is against this background that the consideration of this DES on the pending motion should be viewed. Defendants delivered this DES to the Court more than 2 months after the last affidavit was submitted on the motion and virtually on the eve of its expected decision, with the knowledge that the last chance for a spring argument in the Court of Appeals was imminent. Consideration of this belated document would place plaintiff upon the horns of a dilemma: either submit the motion without the benefit of adequate time to controvert the substance of the DES or upset the sensible approach to appellate review previously outlined.

The prejudice to plaintiff from the consideration of the DES without plaintiff having had adequate time to controvert it is obvious. A hasty reading of parts of the DES has revealed that this unsworn document is replete with self-serving statments (statements generally not even attributed to anyone in particular). These self-serving statements are interspersed throughout some 373 pages, including graphs and tables purporting to represent the results of modeling.

It is significant that, when the NRC publicly announced the availability of the DES, it stated that interested persons may submit comments on the DES until May 17, 1976.

41 Fed. Reg. 12937 (March 29, 1976). This highlights two important aspects of the DES: 1) it is a draft, that is, a document the very purpose of which is to be the subject of critical comment and 2) it is sufficiently lengthy and complex to require an appreciable period of time for review.

The unfairness inherent in eleventh hour consideration of the DES is compounded by the fact that the defendants surely could have presented much, if not all, of the information contained in the DES well before the document itself was published.\* For example, on December 12, 1975, Mr. Richter told the Court that only 3 days later the first 6 chapters of a Sandia Laboratories Report would be delivered to the NRC (Transcript, December 12, 1975, p. 8). Similarly, Robert F. Barker of the NRC stated in his January 1976 affidavit that portions of the DES had already been distributed for federal review and comment. Quite apart from these specific examples, it is obvious that the i formation contained in the DES was known by defendants well before the entire DES had been drafted, edited, reviewed and published.

The fact that defendants saw fit not to present any affidavits to the Court since January but rather waited until a document designed for non-litigation purposes had been fully subjected to the bureaucratic process should not serve to prejudice plaintiff.

-3-

<sup>\*</sup>Interestingly, the lists of references at the end of each of the chapters of the DES appear to contain reference to only litem after January 1976 and that is a reference to a private communication in March 1976 (DES, p. III-28)

Of course, we do not suggest that defendants lack the right to present further information to the Court in the proper way at other appropriate junctures in this action. We merely urge that the pending motions must terminate some time and simple equity makes it appropriate that the DES not be considered on these motions.

If the Court determines that it will not consider the DES, we would request that the motions be decided as soon as possible without an evidentiary hearing. However, if the Court determines that it will consider the DES on any of the motions, we respectfully request that the Court notify us before it decides any such motion so that we can determine whether to make any further submissions.

Very truly yours,

LOUIS J. LEFKOWITZ Attorney General By

Joseph J. Zelling

JJZ:dg

JOSEPH J. ZEDROSSER Assistant Attorney General

cc: Charles F. Richter, Esq.

United States Department of Justice

ADDRESS REPLY TO
"UNITED STATES ATTORNEY"
AND HEFER TO
INITIALS AND NUMBER

75-1572

UNITED STATES ATTORNEY
SOUTHERN DISTRICT OF NEW YORK
WHITE STATES COURTED TAK One St. Andrew's Plaza
NEW YORK, N. Y. 10007

April 13, 1976

Honorable William C. Conner United States District Judge United States Courthouse Foley Square New York, New York 10007

Re: State of New York v. The Nuclear Regulatory Commission, et al. 75 Civ. 2121 (WCC)

Dear Judge Conner:

Last week your law clerk, Mr. David Aranson, inquired as to the effect of Public Law 94-79 (the Scheuer Amendment) and of Public Law 94-187 (the amendment to the Energy Research and Development Administrations' appropriations bill) both of which limit or prohibit certain air shipments of plutonium.

The NRC has informed me that shortly after the Scheuer Amendment became effective, the NRC ordered its licensees not to ship plutonium by air and, at NRC's request, States with which the NRC has agreements pursuant to 42 USC § 2021 took similar action with respect to their licensees. The Scheuer amendment does permit air shipments of medical devices containing plutonium designed for individual human application. However, the NRC does not maintain records indicating the number of such shipments.

Hon. William C. Conner

April 13, 1976

As to shipments by or for ERDA, I have been informed that there have been 13 shipments of plutonium by air since January, 1976. All of these shipments were related to the national security and were therefore permitted under Public Law 94-187 (See 41 Fed. Reg. 6259).

I hope that this information sufficiently satisfies your request.

Respectfully yours,

ROBERT B. FISKE, JR., United States Attorney

CHARLES FRANKLIN RICHTER

Assistant United States Attorney

Tel. (212) 791-1972

cc: Joseph Zedrosser,
Assistant Attorney General
Environmental Law Unit
Two World Trade Center
New York, New York 10047

BY HAND



STATE OF NEW YORK

LOUIS J. LEFKOWITZ

### DEPARTMENT OF LAW

TWO WORLD TRADE CENTER
NEW YORK, N.Y. 10047
TELEPHONE: (212) 488-7567

PHILIP WEINBERG
ASSISTANT ATTORNEY GENERAL
IN CHARGE OF
ENVIRONMENTAL PROTECTION
BUREAU

April 22, 1976

Honorable William C. Conner United States District Judge United States Courthouse Foley Square New York, New York

> Re: State of New York v. Nuclear Regulatory Commission, et al. 75 Civ. 2121 (WCC)

Dear Judge Conner:

In a letter dated April 2, 1976, the State of New York respectfully urged that this Court not consider the substance of the Draft Environmental Statement on the Transportation of Radioactive Material by Air and other Modes ("DES") on any of the pending motions and set forth detailed reasons.

We respectfully urge that the Court promptly decide whether, in light of our April 2nd letter, it will consider the substance of the DES. Further delay in making this threshold determination will greatly prejudice plaintiff.

We filed the brief and appendix on the appeals from this Court's two prior orders on April 16, 1976, in accord with a March 1, 1976 order of the Court of Appeals. In our motion requesting that order of the Court of Appeals, we informed the Court of Appeals that we hoped to bring up any possible appeal from the now pending motions at the same time as the appeals from the prior motions and that your law clerk had informed us that a disposition of the now pending motions would be made on or before March 31, 1976. We note that the last affidavits on the pending motions were filed on January 23, 1976.

To: Hon. William C. Conner -2- April 22, 1976 When the pending motions are decided, we intend to request the Court of Appeals to accelerate any appeal regarding the pending motions so that it may be heard on June 7, 1976, the date presently scheduled for argument of the appeals regarding the prior motions. As we indicated in our letter of April 2, we respectfully request that, 1) if the Court does not consider the substance of the DES on any of the pending motions, the motions be decided as soon as possible without an evidentiary hearing and, 2) if the Court does consider the substance of the DES on any of the pending motions, the Court notify us before it decides any such motion so that we will be able to submit some reply to the DES on such motion. Respectfully yours, LOUIS J. LEFKOWITZ Attorney General By JOSEPH J. ZEDROSSER Assistant Attorney General JJZ:dg cc: Charles F. Richter, Esq. 1189 UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

THE STATE OF NEW YORK,

Plaintiff, : 75 Civ. 2121 (WCC)

MEMORANDUM

AND ORDER

- against -

THE NUCLEAR REGULATORY COMMISSION, and WILLIAM ANDERS as Chairman; THE ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION and DR. ROBERT C. SEAMANS as the Administrator; THE DEPARTMENT OF TRANSPORTATION, and WILLIAM T. COLEMAN as Secretary of Transportation; THE DEPARTMENT OF STATE and HENRY A. KISSINGER as Secretary of State; THE FEDERAL AVIATION ADMINISTRATION and ALEXANDER P. BUTTERFIELD as the Chairman,

Defendants.

APPEARANCES:

HONORABLE ROBERT B. FISKE, JR. United States Attorney for the Southern District of New York One St. Andrew's Plaza New York, New York 10007

CHARLES FRANKLIN RICHTER, ESQ.
NATHANIEL L. GERBER, ESQ.,
Assistant United States Attorneys
Of Counsel

HONORABLE LOUIS J. LEFKOWITZ, Attorney General of the State of New York Two World Trade Center New York, New York 10047

JOHN F. SHEA, III, ESQ.,
JOSEPH J. ZEDROSSER, ESQ.,
Assistant Attorneys General
Of Counsel

## CONNER, D. J .:

This action, commenced last summer, charges defendants with having violated the National Environmental Policy Act, 42 U.S.C. § 4321, et seq. (NEPA), and the Council on Environmental Quality Guidelines, 40 C.F.R. § 1500, et seq. (CEQ Guidelines), their policies and goals by transporting, or allowing the transportation of, by air and related connecting surface transport (air/land transport) special nuclear material (SNM) without having issued a generic Environmental Impact Statement (EIS) in compliance with Section 102(2)(c) of NEPA, 42 U.S.C. § 4332(2)(c).

Shortly after the action was filed, plaintiff moved for a preliminary injunction restraining the air/land transport of specified forms of SNM, i.e., plutonium and uranium enriched in the isotopes 233 or 235. In a Memorandum and Order dated September 9, 1975, that motion was denied.

In support of that motion, plaintiff had propounded three theories upon which it was asserted that a preliminary injunction could properly issue. First, it was argued that defendants' failure to file an EIS violated a clear, non-discretionary legal duty under NEPA tantamount to irreparable harm per se and requiring the issuance of a preliminary injunction. Second, plaintiff alleged that the continued air/land shipment of plutonium and enriched uranium presented to human life a substantially greater risk, either from crash or

terrorist attack, than did the shipment of such material by surface transport. Finally, plaintiff asserted that a balancing of the relative hardships militated in favor of granting the injunctive relief it sought.

In its September 9, 1975 Memorandum and Order, the Court specifically considered, and rejected, all three arguments. Plaintiff did not seek reargument or reconsideration of that decision, but instead elected to pursue its appellate remedies. The argument of plaintiff's appeal is scheduled for hearing within a few months.

Despite the pendency of its appeal, and more than three months after its initial motion had been denied, plaintiff filed two additional motions. The first seeks a summary judgment, pursuant to Rule 56 F.R.Civ.P., declaring defendants to be in violation of NEPA and directing defendants to make available a draft EIS, to hold hearings and accept comments thereon and to file a final EIS by specified dates certain. Plaintiff also petitions for an order, purportedly pursuant to Rule 65(a) F.R.Civ.P., enjoining all air/land transport of plutonium and the commercial air/land transport of uranium enriched in the isotope 235 from, to and over the United States and its territories, pending the determination of this action.

## SUMMARY JUDGMENT MOTION

Although steadfastly refusing to take a position as to its legal obligation to file an EIS, defendant Nuclear Regulatory Commission (NRC) has, from a date prior to the filing of this lawsuit, made clear its intention to prepare an impact statement. Nevertheless, plaintiff seeks a summary judgment declaring that defendants have violated NEPA and CEQ Guidelines by failing to file an EIS heretofore.

In light of defendants'announced commitment to comply promptly with NEPA and CEQ Guidelines, this Court cannot help wondering whether the ultimate objective of this lawsuit -- prompt compliance with NEPA and CEQ Guidelines -- would in any way be advanced by a ruling that defendants have been, or are, in technical violation of a federal statute. Certainly, a declaratory judgment would not end the case. Neither would it improve plaintiff's chances of securing the preliminary injunction plaintiff desires. Since plaintiff, of course, is not seeking damages for any past violations, such a ruling at this time would resolve a merely academic conflict, a particularly inappropriate field for the judicial plow.

Plaintiff urges that the summary judgment it seeks, together with a direction by the Court specifying deadlines by which defendants must make the draft EIS available, hold hearings and accept comments thereon and ultimately file the

final statement, is necessary to prevent administrative delay on the part of the government officials engaged in preparing the EIS. If plaintiff were correct, the relief requested might indeed be appropriate. However, beyond emphasizing a single delay occasioned by an expansion in the scope of the EIS, plaintiff has not even attempted to demonstrate that the NRC has failed to proceed expeditiously in preparing the EIS. Indeed, the evidence is to the contrary. During the pendency of this motion, the draft EIS has been made available and a tentative schedule for public comment and hearings thereon has been set.

Under these circumstances, I must decline plaintiff's invitation to set arbitrary deadlines which might require those charged with preparing the EIS to sacrifice thoroughness. Of course, if it should subsequently appear that the NRC is unduly protracting the steps precedent to filing the final EIS, or in any other respect not proceeding diligently and in good faith, the Court will not hesitate to grant appropriate relief.

II.

## PRELIMINARY INJUNCTION MOTION

In making its "new" motion for preliminary injunctive relief, plaintiff places principal reliance upon the hundreds of pages of affidavits, letters and memoranda submitted in

connection with the prior motion. Plaintiff supplements its prior submissions with two additional affidavits by Theodore T. Mason and Robert R. Leamer, an affidavit by James A. Eckols, Chairman of the Hazardous Materials Committee of the Airline Pilots Association, and an attorney's affidavit signed by John F. Shea III, Esq.

Plaintiff offers essentially two arguments in favor of the instant motion. The first challenges this Court's earlier ruling that not every NEPA violation need be remedied by injunctive relief. Plaintiff's second argument questions the Court's prior finding that the continued shipment by air of SNM does not involve a measurably greater risk of adverse environmental impact than does the shipment of such material by surface transport, the alternative urged by plaintiff.

# Mandatory Preliminary Injunction

As this Court indicated in its prior memorandum, the procedural requirements of NEPA were intended, not to provide the basis for an automatic injunction whenever an EIS is not timely filed, but rather to make it possible for the courts to determine whether responsible federal agencies are meeting the environmental obligations with which Congress has charged them. Certainly, the district courts have the power to grant preliminary injunctive relief in a NEPA case when such is necessary to effectuate the Congressional purpose.

However,

" \* \* \* it remains within the sound discretion of a district court to decline an injunction, even where deviations from prescribed NEPA procedures have occurred."

(Footnotes omitted). Conservation Society of Southern Vermont v. Secretary of Transportation, 508 F.2d 927, 934 (2d Cir. 1974).

See Environmental Defense Fund, Inc. v. Callaway, 497 F.2d

1340 (8th Cir. 1974); Environmental Defense Fund, Inc. v.

Froehlke, 477 F.2d 1033 (8th Cir. 1973); Lathan v. Volpe,

455 F.2d 1111, 1117 (9th Cir. 1971); Arkansas Community

Organization for Reform Now v. Brinegar, 398 F.Supp. 685,

699 (E.D. Ark. W.D. 1975); City of Romulus v. County of

Wayne, 392 F.Supp. 578, 594 (E.D. Mich. S.D. 1975); Minnesota

Public Interest Research Group v. Butz, 358 F.Supp. 584, 624
25 (D.Minn. 1973), aff'd, 498 F.2d 1314 (8th Cir. 1974).

Plaintiff has taken exception to that part of the

Court's earlier memorandum which distinguished the situation
in this case from those NEPA cases in which a denial of injunctive relief would, with certainty, have resulted in an actual,
imminent, irreversible change of circumstances, i.e., the

construction of a dam or foresting of a wilderness, and thus have
rendered ineffectual any EIS which might ultimately be ordered.

Plaintiff takes particular issue with the Court's characterization of air shipment of SNM as "the status quo[,] \* \* \* a

method of transporting SNM which has subsisted without any
demonstrable adverse environmental impact for twenty-five years."

Plaintiff maintains that each and every shipment of SNM constitutes a separate major federal action significantly affecting the environment and that, as does the construction of a dam, power plant or highway, each such shipment requires a separate EIS. It is thus argued that, in the absence of an EIS, each air shipment of SNM constitutes a separate violation of NEPA and "like the construction of a building or a highway \* \* \* does alter the status quo." Plaintiff concludes by pointing out that

"[f]ederal agencies have constructed dams even longer than they have licensed, approved, allowed or executed air shipments of plutonium or uranium and that fact has not been an obstacle to injunctive relief. Indeed, if the federal government sought to enjoin illegal actions, would the defendant be heard to say that those illegal actions could not be enjoined because the defendant had been in the habit of taking such actions for a long time?"

This argument misses the entire thrust of the rationale it questions. Patently, the fact that a course of illegal conduct has been followed for many years does not perforce foreclose the issuance of an injunction restraining such activity. However, when conduct is illegal because it violates a statute which requires the filing of an "Environmental Impact Statement," the fact that the challenged activity has been engaged in for many years without any adverse environmental impact whatsoever is relevant in determining the necessity of a pre liminary injunction pending fulfillment of the defendants' commitment to comply with the law.

When an injunction sought to prevent the construction of a dam is denied and the dam is built, the result is certain and irreversible. The status quo ante is not going to be restored by draining the reservoir and demolishing the dam. Any subsequently filed EIS would constitute an exercise in futility.

In this case, on the other hand, the potential damage is not at all so clear. Whether I grant or deny the injunction sought, once the promised EIS is completed, it would be no more or less difficult to effectuate its recommendations and to modify the regulations governing the transport of SNM than it would be to do so today. Nor has plaintiff shown that an injunction would expedite the preparation, or enhance the quality, of the EIS.

For the reasons set forth above, I conclude that this Court's earlier ruling must stand unaltered. A trial court must go beyond the mere fact that NEPA may have been violated and consider all the circumstances in determining whether a course of conduct may be permitted to proceed pending the completion of an EIS. See Environmental Defense Fund, Inc. v. Froehlke, supra, at 1037.

## Actual Irreparable Injury

From the outset, plaintiff has argued that continued air/land transport of SNM involves some danger, albeit a

mathematically very remote danger, of actual irreparable injury. In its prior application, plaintiff sought a blanket injunction restraining all air/land transport of SNM. The motion presently before the Court is somewhat narrower in scope. While plaintiff continues to seek the cessation of all air/land transport of plutonium, the relief requested no longer extends to non-commercial, i.e., military, air/land transport of enriched uranium.

Reasserting the arguments proffered in support of its prior application, plaintiff contends that air/land transport of SNM endangers human life in two ways. First, with respect to plutonium, it is asserted that an air crash could conceivably rupture the receptacles in which this highly toxic form of SNM is shipped and, assuming the presence of certain meteorological and geographical conditions, could result in severe injury to the population of the fallout area. Second, with respect to both plutonium and enriched uranium, plaintiff claims that airport security methods are so lax that a determined band of terrorists could gain access to a shipment of SNM and he eafter disperse it into the atmosphere, sell it on a black market, or even use it to manufacture a nuclear explosive device.

Apparently in response to the Court's earlier conclusion that "the increased possibility of hijacking involved in surface transport more than offsets any increased chance of

1199

accidental release which air transport may present," plaintiff suggests that military-assisted surface transport of plutonium would provide the relatively low crash-stress environment afforded by surface transport without any added risk of terrorist activity. In fact, plaintiff argues, military-assisted surface transport would be less vulnerable to terrorist acts than is the present commercial air transport system.

With regard to enriched uranium, recognizing that SNMs other than plutonium do not present any hazard to human life in the event of air crash, plaintiff no longer secks the cessation of all air transport, but rather, "seeks a lesser remedy" -- the cessation of all commercial air/land transport. Plaintiff suggests a number of military-assisted air shipment alternatives which it urges would eliminate the possibility of terrorist activity.

The resolution of plaintiff's position involves a number of essentially factual questions, i.e., whether the commercial air shipment of SNM presents any cognizable danger to human life and whether there are any practical alternatives which would reduce the risk of injury, which cannot be resolved without the aid of an evidentiary hearing.

#### III.

### EFFECT OF PENDING APPEAL

In the absence of an appeal, a district court has complete power over its interlocutory orders, be they injunctive or otherwise, and it lies within the district court's discretion to consider newly presented argument or evidence. Marcon Wireless Telegraph Co. v. United States, 320 U.S. 1, 46-49 (1943); Ideal Toy Corp. v. Sayco Doll Corp., 302 F.2d 623, 625 (2d Cir. 1962). However, once a notice of appeal has been filed, jurisdiction over the issues presented on the appeal passes to the appellate court and the appellant is not usually entitled to present new evidence or argument to the trial court during the pendency of the appeal. See Turner v. H.M.H. Publ. Co., 328 F.2d 136, 137 (5th Cir. 1964); Ideal Toy Corp. v. Sayco Doll Corp., supra.

The leading case on point is <u>Ideal Toy Corp. v. Sayco</u>

<u>Doll Corp.</u>, <u>supra</u>. In that case, Judge Dimock had granted a

preliminary injunction, from which order an appeal was filed.

Subsequently, Judge Bryan denied a motion to vacate or modify the injunction. The motion had been based primarily upon facts which were not previously in evidence.

Over a vigorous dissent by Justice Clark, the majority drew a distinction between cases in which appeals had been filed and cases in which appeals had not been filed. The

Court ruled that aside from applications to preserve "the status quo as of the time of appeal" -- applications which could have no potential effect upon the issues then before the appellate court -- motions based upon new evidence or argument cannot be considered absent leave of the court of appeals to proceed below. The Court reasoned that, absent permission of the appellate court to reopen, sound judicial administration demands that the trial judge exercise jurisdiction only to the extent permitted by Rule 62(c), F.R.Civ.P. That Rule, the Court concluded, authorizes the modification of injunctive orders during the pendency of an appeal therefrom only to preserve the status of the case as it sits before the court of appeals or, when "the judge is satisfied that his order was erroneous" -- the latter, of course, involving only evidence that was before the trial judge at the time he rendered the ruling under appeal.

Any contrary reading of <u>Ideal Toy</u> would, in effect, erase the distinction between interlocutory orders not appealed from and over which "a district court has complete power" and those appealed from and over which "jurisdiction passes to the appellate court," a distinction that, as noted above, was clearly drawn by the majority of the <u>Ideal</u> Court.

Despite a rigorous effort to categorize the present application as a "new motion" pursuant to Rule 65(a) F.R. Civ.P. and thus to circumvent the mandate of Ideal Toy, the

motion presently before the Court is identical to that filed last summer except to the extent that non-commercial air/land transport of enriched uranium is not sought to be enjoined. This is a <u>de minimus</u> change, since, from the outset, plaintiff has conceded plutonium to be the only form of SNM presenting a danger to human life in the event of an air crash.

Of the more than twenty affidavits referred to in the present notice of motion, only three were not submitted in connection with the prior application. The similarity between the relief sought in the two motions is highlighted by the comment in plaintiff's affidavit in support of the latter motion that

"[i]f the relief requested in the instant notice of motion is granted, prosecution of the appeal from the earlier order may not be necessary."

It is clear the plaintiff's "new" motion, which

"rel[ies] on all previous affidavits, letters and memoranda

submitted to the Court" and "does not repeat all of the arguments set forth in plaintiff's [previous] memoranda of law

\* \* but rather incorporates them \* \* \* in their entirety,"

is clearly an attempt to reopen this Court's prior ruling

presently on appeal.

In this case plaintiff is not seeking a stay pending appeal, but rather seeks to reopen the Court's prior decision.

Moreover, the relief plaintiff requests would likely moot the pending appeal. Under these circumstances, the rationale of <u>Ideal Toy</u> demands that, before the evidentiary hearing referred to above is held, leave should be obtained from the Court of Appeals which, in its discretion, can suspend proceedings while new matter is introduced before this Court.

A date for an evidentiary hearing will be set immediately upon notification by plaintiff that the Court of Appeals has granted leave to proceed.

SO ORDERED.

WILLIAM C. CONNER
United States District Judge

Dated: New York, New York
May 7, 1976

### FOOTNOTES

 Special nuclear material (SNM) is defined in Section 11(aa) of the Atomic Energy Act of 1954, 42 U.S.C. § 2014(aa), as:

> "(1) plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the Commission, pursuant to the provisions of section 2071 of this title, determines to be special nuclear material, but does not include source material; or (2) any material artificially enriched by any of the foregoing, but does not include source material."

The papers submitted in this action are addressed only to plutonium and uranium enriched in either of the isotopes 233 or 235.

2. 42 U.S.C. § 4332 provides, inter alia:

"The Congress authorizes and directs that, to the fullest extent possible:
(1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter, and (2) all agencies of the Federal Government shall --

- (C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on --
- (i) the environmental impact of the proposed action,
- (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,

- (iii) alternatives to the proposed action,
- (iv) the relationship between local shortterm uses of man's environment and the maintenance and enhancement of long-term productivity, and
- (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented."
- 3. Plaintiff reports to the Court that uranium enriched in the isotope 233 is not a subject of the instant motion, there being no immediate plans to transport that SNM by air.
- 4. Defendant NRC is apparently acting as the "lead" federal agency. See Natural Resources Defense Council v. (\* laway, 524 F.2d 79, 86 (2d Cir. 1975).
- 5. For the purposes of plaintiff's motion for injunctive relief, it has been assumed, and in the absence of defendants' positing an argument to the contrary, it will continue to be assumed, that plaintiff can satisfy the preliminary injunction test of "probable success on the merits."

  However, since the mere violation of NEPA or CEQ Guidelines does not mandate the issuance of a preliminary injunction, see text, infra, the issuance of the injunction plaintiff seeks must await its demonstration of the presence of other well established criteria relevant to a ruling that preliminary injunctive relief is appropriate.
- 6. Although a copy of the draft EIS was submitted to the Court, none of the substantive portions of that statement was relied upon in deciding the instant motions.

7. In recent months, Congress has limited the number of air shipments of plutonium through Public Laws 94-79 and 94-187. Shortly after Public Law 94-79 became effective, the NRC ordered its licensees to cease shipping plutonium by air and, at the NRC's request, states with which the NRC has agreements pursuant to 42 U.S.C. § 2021 took similar action with respect to their licensees. The above does not extend to medical devices which are designed for individual human application.

The Energy Research and Development Administration, the only non-military shipper of plutonium which does not need an NRC license, makes approximately one shipment of plutonium by air each week. All of these shipments are assertedly related to the national security exception to Public Law 94-187.

- 8. Plutonium is conceded by plaintiff to be the only SNM which presents any real hazard to human life in the event of an air crash. This fact was not taken into consideration by plaintiff in framing its initial injunction motion, but is reflected in its present, more limited application.
- 9. Defendants have cited, but have not seriously discussed, the relevance of two statutes, 18 U.S.C. § 1385 and 31 U.S.C. § 628, in support of their contention that military-assisted transport of SNM is of "questionable legality." A review of the legislative history of these statutes and the few cases which have construed them leaves unclear what relevance Sections 1385 and 628 have to the issue at bar. However, defendants are given leave, if they elect to do so, to submit a supplemental brief developing that position.

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

THE STATE OF NEW YORK,

Plaintiff,

-against-

The Nuclear Regulatory Commission, and WILLIAM ANDERS as Chairman; the Energy Research and Development Administration and DR. ROBERT C. SEAMANS as the Administrator; the Department of Transportation, and WILLIAM T. COLEMAN as Secretary of Transportation; the Department of State and HENRY A. KISSINGER as Secretary of State; the Civil Aeronautics Board and ROBERT D. TIMM as the Chairman; the Federal Aviation Administration and ALEXANDER P. BUTTERFIELD as the Chairman; the United States Customs Service and VERNON B. ACREE as Commissioner and FRED R. BOYETT as Regional Commissioner,

NOTICE OF APPEAL

:

75 Civ. 2121 (WCC)

Defendants.

Notice is hereby given that the State of New York, plaintiff in the above-captioned action, hereby appeals to the United States Court of Appeals for the Second Circuit from each and every part of the order of the Honorable William C. Conner, United States District Judge entered in this action on the 7th day of May, 1976, denying the motions of the State of New York for a preliminary injunction and for declaratory and mandatory relief.

Dated: New York, New York

May 12, 1976

LOUIS J. LEFKOWITZ Attorney General of the State of New York Attorney for Plaintiff-Appellant By

JOHN F. SHEA,

Assistant Attorney General

TO: ROBERT B. FISKE, JR. United States Attorney for the Southern District of New York Annex One St. Indrew's Plaza New York, New York 10007

CFR:ce 75-1672

BY HAND

May 13, 1976

Honorable William C. Conner United States District Judge United States Courthouse Foley Square New York, New York 10007

Re: The State of New York v.
The Nuclear Regulatory Commission,
et al. -- 75 Civ. 2121 (WCC)

Dear Judge Conner:

We were informed yesterday that plaintiff has filed a notice of appeal from your decision of May 7, 1976, in this action. A question has arisen as to whether the draft environmental impact statement (the "RIS") which defendants sent to you will be part of the record on this appeal, since plaintiff's counsel has argued that it is not. At plaintiff's request, a conference was scheduled before you on Friday, May 14, 1976, at 4:15 p.m. to seek to resolve this question.

Defendants are writing this letter because they believe that such a meeting would be an unnecessary imposition upon your time. The EIS was sent to you by defendants under covering letter because they believed it was relevant to the motion for a preliminary injunction which was before you. I personally delivered it to your chambers so that you would receive it as quickly as possible.

It is surprising that plaintiff would even claim that under these circumstances the EIS is not part of the record. Surely the Court of Appeals should have before it all documents which were before you. What consideration the Honorable William C. Conner

May 13, 1976

Court of Appeals will give to such documents is for that Court to decide.

Plaintiff claims that the EIS is not part of the record because you stated in footnote 6 of your May 7 opinion that: "Although a copy of the draft EIS was submitted to the Court, none of the substantive portions of that statement was relied upon in deciding the instant motions." Plaintiff apparently contends that only documents which are relied upon are part of the record on appeal.

Rule 10(a) of the Federal Rules of Appellate Procedure, which states the standard of what constitutes the record on appeal, shows that plaintiff is incorrect. It provides:

> The original papers and exhibits filed in the district court, the transcript of proceedings, if any, and a certified copy of the docket entries prepared by the clerk of the district court shall constitute the record on appeal in all cases.

While, as Professor Moore notes citing, inter alia, Treasure Imports, Inc. v. Henry Armdur & Sons (2d Cir. 1942), a district court does not have the authority to determine what is in the record on appeal, he also states that "original papers" as used in Rule 10(a) refers "to all papers presented to the district court and filed in the record and to all papers filed by the district court itself." 9 Moore's Federal Practice, Paragraph 210.04[1] and Paragraph 210,04[1]N.17.

Honorable William C. Conner

May 13, 1976

While defendants believe that the EIS is already part of the record, the matter could be readily resolved if you would have it filed with the clerk of the district court and added to the docket sheet. We respectfully request that this be done and that the conference scheduled before you this Friday be cancelled as unnecessary.

Respectfully yours,

ROBERT B. FISKE, JR. United States Attorney

Bv:

CHARLES FRANKLIN RICHTER
Assistant United States Attorney
Telephone: (212) 791-1972

cc: Joseph Zedrosser
Assistant Attorney General
of the State of New York
Two World Trade Center
New York, New York

May 13, 1976

Honorable William C. Conner United States District Judge United States Courthouse Poley Squares New York, New York

> Re: State of New York v. Nuclear Regulatory Commission, et al. 75 Civ. 2121 (WCC)

Dear Judge Conner:

The State of New York has taken an appeal from the Court's order of May 7, 1976. At a conference yesterday before Honorable Nathaniel Fensterstock, Staff Counsel for the Court of Appeals, Assistant U.S. Attorney Charles F. Richter took the surprising position that the Draft Environmental Statement on the Transportation of Radioactive Material by Air and Other Modes ("DES") would be part of the appendix on appeal from the above-mentioned order.

The State's position is that, since the Court clearly stated at footnote 6 of its Memorandum of May 7, 1976, that none of the substantive portions of the DES was relied upon in deciding the motions, the Court did not make the DES part of the record on appeal.

Accordingly, it would not be included in the appendix.

Mr. Fensterstock suggested that we contact Your Honor in order to seek to resolve this dispute. The State of New York applies for a ruling by this Court that the DES is not part of the record on appeal and has asked To: Honorable William C. Conner
Re: State of Naw York v. Nuclear
Regulatory Commission, et al.

May 13, 1976

for a conference to be held at 4:15 p.m. on Friday, May 14, in accord with the Court's practice. Your senior law clerk, David Aronson, has asked both sides to submit letters to the Court prior thereto.

The critical issue here is not simply whether the 373 page DES is to be reproduced in the appendix. Rather, the critical issue is whether that DES is a part of the record on appeal. If the DES were a part of the record on appeal, it could be referred to by the defendants on the appeal, even if it were not reproduced in the appendix. By the same token, since the DES is not part of the record, it is not a document to be considered by the Court of Appeals, contrary to Mr. Richter's suggestion at page 1-2 of his letter of May 13, 1976.

Under Rule 10 (e) of the Federal Rules of
Appellate Practice, the District Court is the forum of
first resort to resolve differences between parties regarding
the record. Rule 10 (e) is substantially identical to former
Rule 75 (d) of the Federal Rules of Civil Procedures and
to still earlier Rule 75 (h) of the Federal Rules of Civil
Procedure

Mr. Richter in his letter of May 13 attempts to mislead the Court regarding its authority by selectively citing Professor Moore. At 9 Moore, Federal Practice 1210.04[1], cited by Mr. Richter, Professor Moore referred to Rule 10(a) of the Federal Rules of Appellate Procedure and declared:

"It is still true that, as the Supreme Court once observed, 'the mere fact that a paper is found among the files in a cause does not of itself make it part of the record.'" (Citation omitted). Id. at 1613.

May 13, 1976

To: Honorable William C. Conner Re: State of New York v. Nuclear Regulatory Commission, et al.

As it happens, the DES has not even been filed with the District Court clerk and does not appear on the docket of this action. In this instance, the lack of filing and docketing accurately reflects the status of the DES as a paper not in the record.

In discussing Rule 10(e), Professor Moore again emphasized that, even if papers have been filed, they are not necessarily proper parts of the record since "papers on file may not have been used in the district court..." 9 Moore, Federal Procedure ¶ 210.08(1) at 1638. He there pointed out that Rule 10(e) provided a method of resolving such a situation. Id. at 1638-39, 1644.

Thus, in U.S. v. International Boxing Club of New York, Inc., 123 F. Supp. 575 (S.D.N.Y. 1954); District Judge Noonan ruled that certain papers were not part of the record where "they did not form a part of the papers on which the decision was based..." Id. at 576. Moreover, in Washington v. U.S., 14 F.R.D. 221 (W.D. Kentucky 1953), the District Judge ruled that a document which had been produced by plaintiff during her testimony and examined by the court but not filed as part of the evidence in the case was not part of the record on appeal.

The test for determining what is in the record is not whether the defendants thought that the DES was relevant or whether Mr. Richter personally delivered it "as quickly as possible" to Your Honor's chambers, as Mr. Richter seems to suggest on page 1 of his May 13 letter. The test is whether the Court based its decision on the DES or, in other words, relied upon it.

Since the Court has clearly stated that it did not rely upon the substance of the DES, it is defendants, not the State of New York, who are unnecessarily imposing upon the Court's time.

The reference at page 5 of the Court's Memorandum to the fact that the DES had been made available and that a tentative schedule for public comment and hearings thereon had been set is not at all inconsistent with the fact that the DES is not part of the record. These facts about availability and scheduling were before the Court in any event since, as we pointed out at page 3 of our April 2, 1976 letter to the Court, the Nuclear Regulatory Commission's announcement on the subject appears at 41 Fed. Reg. 12937 (March 29, 1976). Mr. Richter's physical delivery of the DES to Your Honor is quite irrelevant in this regard. The State had asked to be notified and given the opportunity to reply to the DES, if the Court had considered the DES. The Court did not give such notice and accordingly the State did not reply to the DES. The Court quite properly did not consider the DES, in light of the equitable considerations set forth in our April 2, 1976, and April 22, 1976, letters to the Court. If the DES nevertheless were now to be added to the record and put before the Court of Appeals, the State would be gravely prejudiced. Therefore, in accord with the procedures of this Court, we respectfully request that a conference be held as scheduled and that the Court promptly rule that the DES is not part of the record on appeal. Very truly yours, LOUIS J. LEFKOWITZ Attorney General JOSEPH J. ZEDROSSER JJZ:rab Assistant Attorney General Charles F. Richter, Esq. Assistant U.S. Attorney 1216

To: Honorable William C. Conner

Re: State of New York v. Nuclear

Regulatory Commission, et al.

May 13, 1976

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1	lhas
2	UNITED STATES DISTRICT COURT
3	SOUTHERN DISTRICT OF NEW YORK
4	x
5	STATE OF NEW YORK, :
6	Plaintiff, :
7	- against - : 75 Civ. 2121
8	NUCLEAR REGULATORY COMMISSION, et al., :
9	Defendants. :
10	x
11	Before:
13	HONORABLE WILLIAM C. CONNER,
14	District Judge.
15	New York, New York
16	May 20, 1976 - 9:45 a.m.
17	Appearances:
18	LOUIS J. LEFKOWITZ, Esq.
19	Attorney General of the State of New York BY: JOSEPH J. ZEDROSSER, Esq.
20	Assistant Attorney General
21	ROBERT B. FISKE, JR., Esq. United States Attorney for the
22	Southern District of New York BY: CHARLES FRANKLIN RICHTER, Egg., and
23	NATHANIEL L. GERBER, Esq. Assistant United States Attorneys
24	

THE COURT: I understand you are having a problem about the content of the record on appeal; specifically whether or not the provisional environmental impact statement should be part of the record.

MR. RICHTER: That is correct, your Honor, and the state requested this conference today, although the government did not see the need for such a conference.

I think we should first point out that we do not believe that you have the authority to resolve the question as to whether the draft EIS --

THE COURT: You better wait and see if I am going to decide it in your favor before you take that position too strongly, because I am prepared to decide that in your favor. Do you still want to press my lack of authority?

MR. RICHTER: No, because I did want to go on to say that it seemed to me that the way that you could resolve this issue is by simply having the draft EIS filed with the clerk.

THE COURT: That will be done.

MR. ZEDROSSER: May I be heard a little bit, your Honor?

THE COURT: You may be. Let me say this.

I don't think there is any doubt about my authority to

decide a dispute as to what ought to be in the record under Appellate Rule 10-E. With respect to this particular document, it was received in chambers and it was examined in the course of resolving these matters. It wasn't received I suppose prior to the original denial of the injunction. It was received after that, and I suppose that is the action appealed from, Mr. Zedrosser; is that correct?

MR. ZEDROSSER: It was apparently delivered to your office shortly before the final order came out, not the order last year, obviously.

THE CLERK: It was delivered I think on March 31.

MR. ZEDROSSER: We received it on Monday the 29th. I believe the Court might have received it the prior Friday. In any case, your Honor, we did ask for the conference, as indicated in our May 13 letter to the Court, we were asking the Court to rule that the draft environmental statement is not part of the record on appeal from the recent order. It is our position that it is clear that it is not, and we are asking the Court to so rule to resolve the dispute. It seems to me dispositive here is what the Court said in its own memorandum of May 7, which is that it did not rely on the substantive portions of the

environmental draft in deciding the motion. The case we have pointed out in our May 13 letter, particularly the one that was decided here in the Southern District some years ago in the International Boxing Club case, makes it clear that if the decision is not based on a particular paper, the mere physical fact that it may be found amongst papers submitted on the case is not enough. As it happens, this paper in fact wasn't filled amongst the papers of the case, which in this case accurately reflects, we believe, its lack of appearance in the record.

This is not just a formal matter, your Honor.

This is a matter of substance. As the Court I am sure recalls, we had submitted letters prior to the Court's decision of May 7, 1976, in which we indicated the equitable reasons why it was inappropriate for a 373-page, self-serving draft impact statement to be brought into the record some two months after the affidavit process has closed. Now it appears —

wasting your breath and time. We did not rely on any of the contents of the statement, but only upon the fact that it had been filed and that it on inspection appeared to be a thorough analysis of the problem, and not a mere token compliance, and that is all that concerned us.

By the same token, the fact of its filing and the fact that it is apparently a thorough and not a token statement would appear to be relevant to the determination to be made by the Court of Appeals. I am not going to tell the Court of Appeals the extent to which they should consider it, but it is clear that I did consider the fact of its filing.

MR. ZEDROSSER: There is no problem about that, your Honor. As we pointed out in our letter to the Court of April 2, the fact of its filing can be found by reference to the Federal Register, 41 Federal Register 12937. Physical delivery by Mr. Richter is irrelevant to the fact of filing or the available of comment. That's a fact of which the Court can take notice, what has been published in the Federal Register.

THE COURT: We don't have the Federal Register -I should not say that. I suppose the Court of Appeals can
take judicial notice of the Federal Register. But the
Federal Register may or may not indicate the number of pages
in the document and the apparent thoroughness of the inquiry.

MR. ZEDROSSER: Your Honor, I must say I re your memorandum opinion of the 7th quite carefully, and I don't note any reference therein to apparent thoroughness. I must say that this makes me even more disturbed about the inclusion of this in the record. We are told on the one

hand that the document was not relied upon. Then we are told on the other hand that it is apparently thorough, something about which whole lawsuits have been centered, namely, the thoroughness and adequacy of impact statements. Yet we were not told that this would be considered and given the opportunity to rebut it, which we requested in our letters. The thoroughness of the impact statement in compliance with NEPA is not even in issue at this point, your Honor. That's not even an impact statement. It is a draft statement.

afield. The question is merely whether this was relied on in making the order of May 7. It seems to me the Court's own footnote makes it clear it didn't rely on it. After that, it seems to me the implication is clear. Judge Noonan's decision in the International Boxing Club case, the other district court decisions we cited in our brief, all make it clear that's the test. It is not a question of whether something is physically delivered to the Court's chambers.

A number of things might be physically delivered to the Court's chambers. The prejudice here is clear.

THE COURT: I don't see any prejudice at all.

MR. ZEDROSSER: Mr. Richter, if this is in the record, will feel free to rely upon anything in the

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373 pages of the statement, even though in fact the Court has said it didn't rely on it. In terms of appellate review, what sense could that possibly make?

Its only function is to prejudice the plaintiff here, who was not in the position to rebut these 373 self-serving pages. It served no appellate function.

THE COURT: Although I didn't perhaps specifically refer to the thoroughness of it, I would not have referred to it at all if it had been or if it had appeared to be a hastily prepared document designed to establish token compliance.

MR. ZEDROSSER: That makes the whole thing even more critical. It is extraordinary that without any warning that the Court would deal with that issue, not an issue before it, I might add, on the pending motion, then have the opinion come out saying it didn't rely on the statement, we didn't respond to it, and now be told it is in the record, it is fair game and they can point to it with pride or whatever one does with such a statement in the Court of Appeals, I find that extraordinary and prejudicial.

THE COURT: I think the fact that a draft environmental impact statement was filed is indeed prejudicial in your case, as it ought to be. If you are

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amazed, I am equally amazed. This case appears to have been filed for public relations purposes and not to accomplish any legitimate purpose. The avowed purpose of the lawsuit was to get the filing of an environmental impact statement. When it becomes apparent that the responsible agencies are proceeding to prepare an environmental impact statement with apparent dispatch, you want to suppress that fact.

What are you really interested in, Mr. Zedrosser,

environmental impact statement with all deliberate speed?

MR. ZEDROSSER: Your Honor, we have been and still are interested in stopping this illegal transport by air of special nuclear materials until such time as the federal defendants comply with the law. That is not a PR type of request, that is a request under the National Environmental Policy Act. Very many NEPA suits are about time, your Honor. The question is what happens between the

We feel this has been clear from the beginning of this case, your Honor. Morever, we stoutly deny that there has been compliance with NEPA up until this time.

time the plaintiff brings suit and the time that eventually

the recalcitrant defendants do comply with the law.

to continue to license or execute these flights.

say unti that time occurs, they shouldn't be allowed

A draft does not a final statement make, your Honor.

Our view of the draft is very different --

THE COURT: Please, let me speak for a moment.

A draft is a necessary step precedent to the filing of a final impact statement. Its purpose is to give all of those concerned, including the attorney general, an opportunity to comment on the draft statement. You would be the first to complain if a final impact statement had been filed without giving all of those concerned the opportunity to comment on a draft. We have a situation in which special nuclear materials were transported for years without incident before there was a National Environmental Policy Act. We have to allow a reasonable opportunity for the preparation of an environmental impact statement pursuant to that Act before we issue injunctive relief.

I have never been convinced that the relief you sought didn't promise more mischief than it was designed to cure. I have never been convinced that transporting special nuclear materials by truck posed a lesser overall hazard than transporting such materials even by commercial aircraft, considering the fact that one of the principal things you are worried about is hijacking. I have not been convinced that hijacking is not a greater hazard in the case of surface transportation where the vehicle is

available to would-be hijackers at every point in its

transit, whereas in air transportation it is available only

at the originating and terminating points. So, much as

I am aware of the fact that an environmental impact

statement is required, as long as I am satisfied, as I am,

that the responsible agencies are proceeding in good faith

and with appropriate diligence to prepare such a statement,

I am not going to give injunctive remedies which may pose

a greater hazard than the present modes of transportation.

MR. ZEDROSSER: Your Honor, it is not my intent to take the Court's time to try to reargue the merits of this matter. There is one thing the Court said on the procedural issue before it that I think is worth pointing out, and that is that the Court pointed out that we would have complained had we not had the right to comment on the draft statement. Quite so. But we are in fact not having the right to comment on the draft statement in terms of this litigation because what happened was that it is now going to be in the record even though we did not have the opportunity to respond. So it seems to me that that argument, if anything, would cut the other way on the procedural matter.

As far as the question of injunctions in general, without going into the details, which we have

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hashed over so many times, we certainly don't feel that
the law under the National Environmental Policy Act requires
that a defendant in violation of the law be given the
opportunity to comply before an injunction issues. We
respectfully submit that that is just not the law.

THE COURT: That's the point you are arguing on appeal, I suppose. I have expressed my point of view, and I won't reiterate it. Your chances of convincing me otherwise are obviously minimal at this point.

I believe that the draft statement is properly a part of the record and I will see that it is properly filed in the clerk's office. It should have been filed there before it came to chambers, but I will see that that is done.

You may argue before the Court of Appeals, of course, that since I did not rely upon any of the substantive statements made in that policy statement, the Court of Appeals should not either in determining whether I was guilty of an error of law in denying the injunctive relief you sought.

(Court adjourned)

## CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Supplemental Appendix Volume I was served on counsel for defendants this 2nd day of June, 1976.

JOHN F. SHEA, III Assistant Attorney General

